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Gusev, Vladimir Y
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Rastelli, Luca
Casman, Stacie J
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Ellerman, Karen
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 Thr Gly Pro Arg Ala His Ile Gly Gly Gly Ala Leu Ala Leu Cys Pro
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 Glu Ser Ser Gly Val Arg Glu Asp Gly Gly Pro Gly Leu Gly Val Arg
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 Glu Pro Ile Phe Val Gly Leu Arg Gly Arg Arg Gln Ser Ala Arg Asn
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 Asp Ala Leu Asp Leu Gly Ala Pro Arg Glu Trp Leu Ser Thr Leu Pro
 3170 3175 3180
 Pro Pro Arg Arg Thr Arg Asp Leu Asp Pro Gln Pro Pro Pro Leu Pro
 3185 3190 3195 3200
 Leu Ser Pro Gln Arg Gln Leu Ser Arg Asp Pro Leu Leu Pro Ser Arg
 3205 3210 3215
 Pro Leu Asp Ser Leu Ser Arg Ser Ser Asn Ser Arg Glu Gln Leu Asp
 3220 3225 3230
 Gln Val Pro Ser Arg His Pro Ser Arg Glu Ala Leu Gly Pro Leu Pro
 3235 3240 3245
 Gln Leu Leu Arg Ala Arg Glu Asp Ser Val Ser Gly Pro Ser His Gly
 3250 3255 3260
 Pro Ser Thr Glu Gln Leu Asp Ile Leu Ser Ser Ile Leu Ala Ser Phe
 3265 3270 3275 3280
 Asn Ser Ser Ala Leu Ser Ser Val Gln Ser Ser Ser Thr Pro Leu Gly
 3285 3290 3295

Pro His Thr Thr Ala Thr Pro Ser Ala Thr Ala Ser Val Leu Gly Pro
 3300 3305 3310
 Ser Thr Pro Arg Ser Ala Thr Ser His Ser Ile Ser Glu Leu Ser Pro
 3315 3320 3325
 Asp Ser Glu Pro Arg Asp Thr Gln Ala Leu Leu Ser Ala Thr Gln Ala
 3330 3335 3340
 Met Asp Leu Arg Arg Arg Asp Tyr His Met Glu Arg Pro Leu Leu Asn
 3345 3350 3355 3360
 Gln Glu His Leu Glu Glu Leu Gly Arg Trp Gly Ser Ala Pro Arg Thr
 3365 3370 3375
 His Gln Trp Arg Thr Trp Leu Gln Cys Ser Arg Ala Arg Ala Tyr Ala
 3380 3385 3390
 Leu Leu Leu Gln His Leu Pro Val Leu Val Trp Leu Pro Arg Tyr Pro
 3395 3400 3405
 Val Arg Asp Trp Leu Leu Gly Asp Leu Leu Ser Gly Leu Ser Val Ala
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 Ile Met Gln Leu Pro Gln Gly Leu Ala Tyr Ala Leu Leu Ala Gly Leu
 3425 3430 3435 3440
 Pro Pro Val Phe Gly Leu Tyr Ser Ser Phe Tyr Pro Val Phe Ile Tyr
 3445 3450 3455
 Phe Leu Phe Gly Thr Ser Arg His Ile Ser Val Glu Ser Leu Cys Val
 3460 3465 3470
 Pro Gly Pro Val Asp Thr Gly Thr Phe Ala Val Met Ser Val Met Val
 3475 3480 3485
 Gly Ser Val Thr Glu Ser Leu Ala Pro Gln Ala Leu Asn Asp Ser Met
 3490 3495 3500
 Ile Asn Glu Thr Ala Arg Asp Ala Ala Arg Val Gln Val Ala Ser Thr
 3505 3510 3515 3520
 Leu Ser Val Leu Val Gly Leu Phe Gln Val Gly Leu Gly Leu Ile His
 3525 3530 3535
 Phe Gly Phe Val Val Thr Tyr Leu Ser Glu Pro Leu Val Arg Gly Tyr
 3540 3545 3550
 Thr Thr Ala Ala Ala Val Gln Val Phe Val Ser Gln Leu Lys Tyr Val
 3555 3560 3565
 Phe Gly Leu His Leu Ser Ser His Ser Gly Pro Leu Ser Leu Ile Tyr
 3570 3575 3580
 Thr Val Leu Glu Val Cys Trp Lys Leu Pro Gln Ser Lys Val Gly Thr
 3585 3590 3595 3600

Val Val Thr Ala Ala Val Ala Gly Val Val Leu Val Val Val Lys Leu
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 Leu Asn Asp Lys Leu Gln Gln Gln Leu Pro Met Pro Ile Pro Gly Glu
 3620 3625 3630
 Leu Leu Thr Leu Ile Gly Ala Thr Gly Ile Ser Tyr Gly Met Gly Leu
 3635 3640 3645
 Lys His Arg Phe Glu Val Asp Val Val Gly Asn Ile Pro Ala Gly Leu
 3650 3655 3660
 Val Pro Pro Val Ala Pro Asn Thr Gln Leu Phe Ser Lys Leu Val Gly
 3665 3670 3675 3680
 Ser Ala Phe Thr Ile Ala Val Val Gly Phe Ala Ile Ala Ile Ser Leu
 3685 3690 3695
 Gly Lys Ile Phe Ala Leu Arg His Gly Tyr Arg Val Asp Ser Asn Gln
 3700 3705 3710
 Glu Leu Val Ala Leu Gly Leu Ser Asn Leu Ile Gly Gly Ile Phe Gln
 3715 3720 3725
 Cys Phe Pro Val Ser Cys Ser Met Ser Arg Ser Leu Val Gln Glu Ser
 3730 3735 3740
 Thr Gly Gly Asn Ser Gln Val Ala Gly Ala Ile Ser Ser Leu Phe Ile
 3745 3750 3755 3760
 Leu Leu Ile Ile Val Lys Leu Gly Glu Leu Phe His Asp Leu Pro Lys
 3765 3770 3775
 Ala Val Leu Ala Ala Ile Ile Ile Val Asn Leu Lys Gly Met Leu Arg
 3780 3785 3790
 Gln Leu Ser Asp Met Arg Ser Leu Trp Lys Ala Asn Arg Ala Asp Leu
 3795 3800 3805
 Leu Ile Trp Leu Val Thr Phe Thr Ala Thr Ile Leu Leu Asn Leu Asp
 3810 3815 3820
 Leu Gly Leu Val Val Ala Val Ile Phe Ser Leu Leu Leu Val Val Val
 3825 3830 3835 3840
 Arg Thr Gln Met Pro His Tyr Ser Val Leu Gly Gln Val Pro Asp Thr
 3845 3850 3855
 Asp Ile Tyr Arg Asp Val Ala Glu Tyr Ser Glu Ala Lys Glu Val Arg
 3860 3865 3870
 Gly Val Lys Val Phe Arg Ser Ser Ala Thr Val Tyr Phe Ala Asn Ala
 3875 3880 3885
 Glu Phe Tyr Ser Asp Ala Leu Lys Gln Arg Cys Gly Val Asp Val Asp
 3890 3895 3900

Phe Leu Ile Ser Gln Lys Lys Lys Leu Leu Lys Lys Gln Glu Gln Leu
3905 3910 3915 3920

Lys Leu Lys Gln Leu Gln Lys Glu Glu Lys Leu Arg Lys Gln Ala Gly
3925 3930 3935

Pro Leu Leu Ser Ala Cys Leu Ala Pro Gln Gln Val Ser Ser Gly Asp
3940 3945 3950

Lys Met Glu Asp Ala Thr Ala Asn Gly Gln Glu Asp Ser Lys Ala Pro
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Asp Gly Ser Thr Leu Lys Ala Leu Gly Leu Pro Gln Pro Asp Phe His
3970 3975 3980

Ser Leu Ile Leu Asp Leu Gly Ala Leu Ser Phe Val Asp Thr Val Cys
3985 3990 3995 4000

Leu Lys Ser Leu Lys Asn Ile Phe His Asp Phe Arg Glu Ile Glu Val
4005 4010 4015

Glu Val Tyr Met Ala Ala Cys His Ser Pro Val Val Ser Gln Leu Glu
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Ala Gly His Phe Phe Asp Ala Ser Ile Thr Lys Lys His Leu Phe Ala
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Ser Val His Asp Ala Val Thr Phe Ala Leu Gln His Pro Arg Pro Val
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Pro Asp Ser Pro Val Ser Pro Ser Leu Ala Val Ser Ser Asp Val Lys
4065 4070 4075 4080

Gln Leu Glu Pro Glu Leu Leu Leu Arg Asn Asn Leu Leu Ser Gly Ile
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Pro Glu Lys Val Gln Gly Ser Val Gly Ala Asn Gly Gln Ser Leu Glu
4100 4105 4110

Asp Thr Glu
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<210> 5

<211> 1438

<212> DNA

<213> Homo sapiens

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tctgaatcga ccaagagagt ataattcagg taaattggaa gagtttgttc aaggaacct 180
tgagagagaa tgtctggagg aaaagtgtag ttttgaagaa gcacgagaag tttttgaaaa 240
cactgaacaa ccaactgaat tttggaagca gtatgttgat ggagatcagt gtgagtcac 300
tccatgttta aatggcgcca gttgcaagga tgacattaat tccatgaat gttgggtgtc 360
ctttgtattt gagggaaga actgtgaatt agatgtggac tatgtaaatt ctactgaagc 420

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agaacataca gagcaaaagc gaaatgtgat tcgaattatt cctcaccaca actacaatgc 720
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<210> 6

<211> 394

<212> PRT

<213> Homo sapiens

<400> 6

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Ile Cys Leu Leu Gly Tyr Leu Leu Ser Ala Glu Cys Thr Val Phe Leu
      20             25             30

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Asp His Glu Asn Ala Asn Lys Ile Leu Asn Arg Pro Lys Arg Tyr Asn
      35             40             45

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```

Ser Gly Lys Leu Glu Glu Phe Val Gln Gly Asn Leu Glu Arg Glu Cys
      50             55             60

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Leu Glu Glu Lys Cys Ser Phe Glu Glu Ala Arg Glu Val Phe Glu Asn
      65             70             75             80

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```

Thr Glu Arg Thr Thr Glu Phe Trp Lys Gln Tyr Val Asp Gly Asp Gln
      85             90             95

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Cys Glu Ser Asn Pro Cys Leu Asn Gly Gly Ser Cys Lys Asp Asp Ile
      100            105            110

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Asn Ser Tyr Glu Cys Trp Cys Pro Phe Gly Phe Glu Gly Lys Asn Cys
      115            120            125

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Glu Leu Asp Val Asp Tyr Val Asn Ser Thr Glu Ala Glu Thr Ile Leu
      130            135            140

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Asp Asn Ile Thr Gln Ser Thr Gln Ser Phe Asn Asp Phe Thr Arg Val
      145            150            155            160

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Val Gly Gly Glu Asp Ala Lys Pro Gly Gln Phe Pro Trp Gln Val Val
      165            170            175

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Leu Asn Gly Lys Val Asp Ala Phe Cys Gly Gly Ser Ile Val Asn Glu
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 Lys Trp Ile Val Thr Ala Ala His Cys Val Glu Thr Gly Val Lys Ile
 195 200 205
 Thr Val Val Ala Gly Glu His Asn Ile Glu Glu Thr Glu His Thr Glu
 210 215 220
 Gln Lys Arg Asn Val Ile Arg Ile Ile Pro His His Asn Tyr Asn Ala
 225 230 235 240
 Ala Ile Asn Lys Tyr Asn His Asp Ile Ala Leu Leu Glu Leu Asp Glu
 245 250 255
 Pro Leu Val Leu Asn Ser Tyr Val Thr Pro Ile Cys Ile Ala Asp Lys
 260 265 270
 Glu Tyr Thr Asn Ile Phe Leu Lys Phe Gly Ser Gly Tyr Val Ser Gly
 275 280 285
 Trp Gly Arg Val Phe His Lys Gly Arg Ser Ala Leu Val Leu Gln Tyr
 290 295 300
 Leu Arg Val Pro Leu Val Asp Arg Ala Thr Cys Leu Arg Ser Thr Lys
 305 310 315 320
 Phe Thr Ile Tyr Asn Asn Met Phe Cys Ala Gly Phe His Glu Gly Gly
 325 330 335
 Arg Asp Ser Cys Gln Gly Asp Ser Gly Gly Pro His Val Thr Glu Val
 340 345 350
 Glu Gly Thr Ser Phe Leu Thr Gly Ile Ile Ser Trp Gly Glu Glu Cys
 355 360 365
 Ala Met Lys Gly Lys Tyr Gly Ile Tyr Thr Lys Val Ser Arg Tyr Val
 370 375 380
 Asn Trp Ile Lys Glu Lys Thr Lys Leu Thr
 385 390

<210> 7

<211> 1108

<212> DNA

<213> Homo sapiens

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 agccagagtc tccaactacc cctgcttggt gccagtcagg tggggtggaa actgccagaa 180
 ggacggccag tccccatca acatcgtaac caccaaggca aaggtggaca aaaaactggg 240
 acgtttcttc ttctctggt acgataagaa gcaaacgtgg actgtccaaa ataacgggca 300
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<210> 8

<211> 336

<212> PRT

<213> Homo sapiens

<400> 8

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20 25 30

Asn Tyr Pro Cys Leu Val Pro Val Lys Trp Gly Gly Asn Cys Gln Lys
35 40 45

Asp Arg Gln Ser Pro Ile Asn Ile Val Thr Thr Lys Ala Lys Val Asp
50 55 60

Lys Lys Leu Gly Arg Phe Phe Ser Gly Tyr Asp Lys Lys Gln Thr
65 70 75 80

Trp Thr Val Gln Asn Asn Gly His Ser Val Met Met Leu Leu Glu Asn
85 90 95

Lys Ala Ser Ile Ser Gly Gly Gly Leu Pro Ala Pro Tyr Gln Ala Lys
100 105 110

Gln Leu His Leu His Trp Ser Asp Leu Pro Tyr Lys Gly Ser Glu His
115 120 125

Ser Leu Asp Gly Glu His Phe Ala Met Glu Met His Ile Val His Glu
130 135 140

Lys Glu Lys Gly Thr Ser Arg Asn Val Lys Glu Ala Gln Asp Pro Glu
145 150 155 160

Asp Glu Ile Ala Val Leu Ala Phe Leu Val Glu Ile Gly Arg Met Asn
165 170 175

Trp Pro Pro Pro Leu Ala Pro Cys Arg Leu Ser Gln Asp Pro Ser Leu
180 185 190

Pro Phe Gln Ala Gly Pro Gln Val Asn Glu Gly Phe Gln Pro Leu Val

195	200	205
Glu Ala Leu Ser Asn Ile Pro Lys Pro Glu Met Ser Thr Thr Met Ala		
210	215	220
Glu Ser Ser Leu Leu Asp Leu Leu Pro Lys Glu Glu Lys Leu Arg His		
225	230	235 240
Tyr Phe Arg Tyr Leu Gly Ser Leu Thr Thr Pro Thr Cys Asp Glu Lys		
245	250	255
Val Val Trp Thr Val Phe Arg Glu Pro Ile Gln Leu His Arg Glu Gln		
260	265	270
Ile Leu Ala Phe Ser Gln Lys Leu Tyr Tyr Asp Lys Glu Gln Thr Val		
275	280	285
Ser Met Lys Asp Asn Val Arg Pro Leu Gln Gln Leu Gly Gln Arg Thr		
290	295	300
Val Ile Lys Ser Gly Ala Pro Gly Arg Pro Leu Pro Trp Ala Leu Pro		
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Ala Leu Leu Gly Pro Met Leu Ala Cys Leu Leu Ala Gly Phe Leu Arg		
325	330	335

<210> 9

<211> 1806

<212> DNA

<213> Homo sapiens

<400> 9

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atcaaggagg	catctggaga	ggtgtacagg	accacagtgg	actacacgta	cttctcagag	240
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<210> 10

<211> 548

<212> PRT

<213> Homo sapiens

<400> 10

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Gln His Pro Pro Leu Val Asn Leu Ser Val Glu Pro Gln Pro Val Leu
 20 25 30

Glu Asp Asn Val Val Thr Phe His Cys Ser Ala Lys Ala Asn Pro Ala
 35 40 45

Val Thr Gln Tyr Arg Trp Ala Lys Arg Gly Gln Ile Ile Lys Glu Ala
 50 55 60

Ser Gly Glu Val Tyr Arg Thr Thr Val Asp Tyr Thr Tyr Phe Ser Glu
 65 70 75 80

Pro Val Ser Cys Glu Val Thr Lys Ala Leu Gly Ser Thr Asn Leu Ser
 85 90 95

Arg Thr Val Asp Val Tyr Phe Gly Pro Arg Met Thr Thr Glu Pro Gln
 100 105 110

Ser Leu Leu Val Asp Leu Gly Ser Asp Ala Ile Leu Ser Cys Ala Trp
 115 120 125

Thr Gly Asn Pro Ser Leu Thr Ile Val Trp Met Lys Arg Gly Ser Gly
 130 135 140

Val Val Leu Ser Asn Glu Lys Thr Leu Thr Leu Lys Ser Val Arg Gln
 145 150 155 160

Glu Asp Ala Gly Lys Tyr Val Cys Arg Ala Val Val Pro Arg Val Gly
 165 170 175

Ala Gly Glu Arg Glu Val Thr Leu Thr Val Asn Gly Pro Pro Ile Ile
 180 185 190

Ser Ser Thr Gln Thr Gln His Ala Leu His Gly Glu Lys Gly Gln Ile
 195 200 205

Lys Cys Phe Ile Arg Ser Thr Pro Pro Pro Asp Arg Ile Ala Trp Ser
 210 215 220
 Trp Lys Glu Asn Val Leu Glu Ser Gly Thr Ser Gly Arg Tyr Thr Val
 225 230 235 240
 Glu Thr Ile Ser Thr Glu Glu Gly Val Ile Ser Thr Leu Thr Ile Ser
 245 250 255
 Asn Ile Val Arg Ala Asp Phe Gln Thr Ile Trp Asn Cys Thr Ala Trp
 260 265 270
 Asn Ser Phe Gly Ser Asp Thr Glu Ile Ile Arg Leu Lys Glu Gln Gly
 275 280 285
 Ser Glu Met Lys Ser Gly Ala Gly Leu Glu Ala Glu Ser Val Pro Met
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 Ala Val Ile Ile Gly Val Ala Val Gly Ala Gly Val Ala Phe Leu Val
 305 310 315 320
 Leu Met Ala Thr Ile Val Ala Phe Cys Cys Ala Arg Ser Gln Arg Asn
 325 330 335
 Leu Lys Gly Val Val Ser Ala Lys Asn Asp Ile Arg Val Glu Ile Val
 340 345 350
 His Lys Glu Pro Ala Ser Gly Arg Glu Gly Glu Glu His Ser Thr Ile
 355 360 365
 Lys Gln Leu Met Met Asp Arg Gly Glu Phe Gln Gln Asp Ser Val Leu
 370 375 380
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 385 390 395 400
 Lys Asp Pro Thr Asn Gly Tyr Tyr Ser Val Asn Thr Phe Lys Glu His
 405 410 415
 His Ser Thr Pro Thr Ile Ser Leu Ser Ser Cys Gln Pro Asp Leu Arg
 420 425 430
 Pro Ala Gly Lys Gln Arg Val Pro Thr Gly Met Ser Phe Thr Asn Ile
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 Tyr Ser Thr Leu Ser Gly Gln Gly Arg Leu Tyr Asp Tyr Gly Gln Arg
 450 455 460
 Phe Val Leu Gly Met Gly Ser Ser Ser Ile Glu Leu Cys Glu Arg Glu
 465 470 475 480
 Phe Gln Arg Gly Ser Leu Ser Asp Ser Ser Ser Phe Leu Asp Thr Gln
 485 490 495
 Cys Asp Ser Ser Val Ser Ser Ser Gly Lys Gln Asp Gly Tyr Val Gln
 500 505 510

Phe Asp Lys Ala Ser Lys Ala Ser Ala Ser Ser Ser His His Ser Gln
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Ser Ser Ser Gln Asn Ser Asp Pro Ser Arg Pro Leu Gln Arg Arg Met
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Gln Thr His Val
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<210> 11
<211> 2405
<212> DNA
<213> Homo sapiens

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 <212> PRT
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<400> 12

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Phe	Gln	Thr	Pro	Gly	Tyr	Ala	Met	Asp	Leu	Asn	Ala	Gly	Arg	Phe	Leu				

565

570

575

Val Asn Gly Gln Cys Gly Tyr Val Leu Lys Pro Ala Cys Leu Arg Gln
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Pro Asb Ser Thr Phe Asp Pro Glu Tyr Pro Gly Pro Pro Arg Thr Thr
595 600 605

Leu Ser Ile Gln Val Leu Thr Ala Gln Gln Leu Pro Lys Leu Asn Ala
610 615 620

Glu Lys Pro His Ser Ile Val Asp Pro Leu Val Arg Ile Glu Ile His
625 630 635 640

Gly Val Pro Ala Asp Cys Ala Arg Gln Glu Thr Asp Tyr Val Leu Asn
645 650 655

Asn Gly Phe Asn Pro Arg Trp Gly Gln Thr Leu Gln Phe Gln Leu Arg
660 665 670

Ala Pro Glu Leu Ala Leu Val Arg Phe Val Val Glu Asp Tyr Asp Ala
675 680 685

Thr Ser Pro Asn Asp Phe Val Gly Gln Phe Thr Leu Pro Leu Ser Ser
690 695 700

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<211> 1059

<212> DNA

<213> Homo sapiens

<400> 13

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<212> PRT

<213> Homo sapiens

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Lys Ala Leu Glu Ala Val Lys Leu Ala Ile Glu Ala Gly Phe His His
 35 40 45

Ile Asp Ser Ala His Val Tyr Asn Asn Glu Glu Gln Val Gly Leu Ala
 50 55 60

Ile Arg Ser Lys Ile Ala Asp Gly Ser Val Lys Arg Glu Asp Ile Phe
 65 70 75 80

Tyr Thr Ser Lys Leu Trp Ser Asn Ser His Arg Pro Glu Leu Val Arg
 85 90 95

Pro Ala Leu Glu Arg Ser Leu Lys Asn Leu Gln Leu Asp Tyr Val Asp
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Leu Tyr Leu Ile His Phe Pro Val Ser Val Lys Pro Gly Glu Glu Val
 115 120 125

Ile Pro Lys Asp Glu Asn Gly Lys Ile Leu Phe Asp Thr Val Asp Leu
 130 135 140

Cys Ala Thr Tip Lys Ala Leu Glu Lys Cys Arg Asp Ala Gly Leu Thr
 145 150 155 160

Arg Ser Ile Arg Val Ser Ser Phe Asn His Lys Leu Leu Glu Leu Ile
 165 170 175

Leu Asn Lys Pro Gly Leu Arg Tyr Lys Pro Thr Cys Asn Gln Val Glu
 180 185 190

Cys His Pro Tyr Leu Asn Gln Ser Lys Leu Leu Glu Phe Cys Lys Ser
 195 200 205

Lys Asp Ile Val Leu Val Ala Tyr Ser Ala Leu Gly Ser Gln Arg Asp
 210 215 220

Pro Gln Trp Val Asp Pro Asp Cys Pro His Leu Leu Glu Glu Pro Ile
 225 230 235 240

Ile Lys Ser Ile Ala Lys Lys His Ser Arg Ser Pro Gly Gln Val Ala

245

250

255

Leu Arg Tyr Gln Leu Gln Arg Gly Val Val Val Leu Ala Lys Ser Phe
260 265 270

Ser Gln Glu Arg Ile Lys Glu Asn Phe Gln Val Phe Asp Phe Glu Leu
275 280 285

Thr Pro Glu Asp Met Lys Ala Ile Asp Gly Leu Asn Arg Asn Leu Arg
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Tyr Leu Ser Phe Phe Ser Leu Ala Gly His Pro Asp Tyr Pro Phe Ser
305 310 315 320

Asp Lys Tyr

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<211> 879

<212> DNA

<213> Homo sapiens

<400> 15

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<211> 279

<212> PRT

<213> Homo sapiens

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35 40 45

Ile Ala Arg Asp Leu Asp Val Ile Tyr Ser Asp Cys Asp Tyr Ile Gln

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Val Lys Glu Asp Leu Val Leu Lys Glu Met Lys Thr Asp Ser Asp Leu 100 105 110		
Tyr Glu Tyr Cys Tyr Gly Val Val Gly Thr Val Gly Glu Leu Leu Thr 115 120 125		
Pro Ile Leu Thr Ser Ser Asn Glu Asn Asn Phe Glu Gln Ala Glu Glu 130 135 140		
Ala Ala Ile Ala Leu Gly Lys Ala Met Gln Ile Thr Asn Ile Leu Arg 145 150 155 160		
Asp Val Gly Glu Asp Phe Gln Asn Gly Arg Ile Tyr Leu Ser Val Glu 165 170 175		
Lys Leu Ala Gln Tyr Arg Val Asn Leu His Ser Ile Tyr Tyr Glu Gly 180 185 190		
Val Ser Pro Asn Tyr Ile Glu Leu Trp Glu Ser Tyr Ala Thr Glu Thr 195 200 205		
Val Arg Leu Tyr Asp Ile Ala Leu Asn Gly Ile Asn Tyr Phe Asp Glu 210 215 220		
Glu Val Arg Tyr Ile Ile Glu Leu Ala Ala Ile Ala Tyr His Glu Ile 225 230 235 240		
Leu Val Glu Val Arg Lys Ala Asn Tyr Thr Leu His Lys Lys Val Tyr 245 250 255		
Val Ser Lys Leu Lys Lys Met Lys Ile Tyr Arg Glu Leu Ser Ala Lys 260 265 270		
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<211> 939

<212> DNA

<213> Homo sapiens

<400> 17

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<211> 260

<212> PRT

<213> Homo sapiens

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Ala Asn Lys Thr Tyr Asn Cys Glu Asn Leu Gly Leu Ser Glu Ile Pro
 35 40 45

Asp Thr Leu Pro Asn Thr Thr Glu Phe Leu Glu Phe Ser Phe Asn Phe
 50 55 60

Leu Pro Thr Ile His Asn Arg Thr Phe Ser Asn Gln His Leu Leu Ala
 65 70 75 80

Gly Leu Pro Val Leu Arg His Leu Asn Leu Lys Gly Asn His Phe Gln
 85 90 95

Asp Gly Thr Ile Thr Lys Thr Asn Leu Leu Gln Thr Val Gly Ser Leu
 100 105 110

Glu Val Leu Ile Leu Ser Ser Cys Gly Leu Leu Ser Ile Asp Gln Gln
 115 120 125

Ala Phe His Ser Leu Gly Lys Met Ser His Val Asp Leu Ser His Asn
 130 135 140

Ser Leu Thr Cys Asp Ser Ile Asp Ser Leu Ser His Leu Lys Gly Ile
 145 150 155 160

Tyr Leu Asn Leu Ala Ala Asn Ser Ile Asn Ile Ile Ser Pro Arg Leu
 165 170 175

Leu Pro Ile Leu Ser Gln Gln Ser Thr Ile Asn Leu Ser His Asn Pro
 180 185 190

Leu Asp Cys Thr Cys Ser Asn Ile His Phe Leu Thr Trp Tyr Lys Glu
 195 200 205

Asn Leu His Lys Leu Glu Gly Ser Glu Glu Thr Thr Cys Ala Asn Pro
210 215 220

Pro Ser Leu Arg Gly Val Lys Leu Ser Thr Ser Ile Trp Leu Pro Thr
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Ala Pro Leu Ile
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<210> 19
<211> 2349
<212> DNA
<213> Homo sapiens

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<212> PPT
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50 55 60
Val Leu Ile Pro Lys Ala Lys Pro Leu Thr Leu Leu Trp Ala Tyr Phe
65 70 75 80
Cys Phe Leu Leu Ala Ala Leu Gly Val Thr Ala Gly Ala His Arg Leu
85 90 95
Trp Ser His Arg Ser Tyr Arg Ala Lys Leu Pro Leu Arg Ile Phe Leu
100 105 110
Ala Val Ala Asn Ser Met Ala Phe Gln Asn Asp Ile Phe Glu Trp Ser
115 120 125
Arg Asp His Arg Ala His His Lys Tyr Ser Glu Thr Asp Ala Asp Pro
130 135 140
His Asn Ala Arg Arg Gly Phe Phe Phe Ser His Ile Gly Trp Leu Phe
145 150 155 160
Val Arg Lys His Arg Asp Val Ile Glu Lys Gly Arg Lys Leu Asp Val
165 170 175
Thr Asp Leu Leu Ala Asp Pro Val Val Arg Ile Gln Arg Lys Tyr Tyr
180 185 190
Lys Ile Ser Val Val Leu Met Cys Phe Val Val Pro Thr Leu Val Pro
195 200 205
Trp Tyr Ile Trp Gly Glu Ser Leu Trp Asn Ser Tyr Phe Leu Ala Ser
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Ile Leu Arg Tyr Thr Ile Ser Leu Asn Ile Ser Trp Leu Val Asn Ser
225 230 235 240
Ala Ala His Met Tyr Gly Asn Arg Pro Tyr Asp Lys His Ile Ser Pro
245 250 255

Arg Gln Asn Pro Leu Val Ala Leu Gly Ala Ile Gly Glu Gly Phe His
260 265 270

Asn Tyr His His Thr Phe Pro Phe Asp Tyr Ser Ala Ser Glu Phe Gly
275 280 285

Leu Asn Phe Asn Pro Thr Thr Trp Phe Ile Asp Phe Met Cys Trp Leu
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Arg Lys Ala Arg Thr Gly Asp Ser Ser Ala
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<210> 21

<211> 1411

<212> DNA

<213> Homo sapiens

<400> 21

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<210> 22

<211> 342

<212> PKT

<213> Homo sapiens

<400> 22

Met Leu Glu Glu Pro Arg Pro Arg Pro Pro Ser Gly Leu Ala Gly
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 20 25 30
 Gly Leu Lys Leu Pro Gly Glu Pro Pro Leu Thr Ala Asn Thr Val Cys
 35 40 45
 Leu Thr Leu Ser Gly Leu Ser Lys Arg Gln Leu Gly Leu Cys Leu Arg
 50 55 60
 Asn Pro Asp Val Thr Ala Ser Ala Leu Gln Gly Leu His Ile Ala Val
 65 70 75 80
 His Glu Cys Gln His Gln Leu Arg Asp Gln Arg Trp Asn Cys Ser Ala
 85 90 95
 Leu Glu Gly Gly Gly Arg Leu Pro His His Ser Ala Ile Leu Lys Arg
 100 105 110
 Gly Phe Arg Glu Ser Ala Phe Ser Phe Ser Met Leu Ala Ala Gly Val
 115 120 125
 Met His Ala Val Ala Thr Ala Cys Ser Leu Gly Lys Leu Val Ser Cys
 130 135 140
 Gly Cys Gly Trp Lys Gly Ser Gly Glu Gln Asp Arg Leu Arg Ala Lys
 145 150 155 160
 Leu Leu Gln Leu Gln Ala Leu Ser Arg Gly Lys Ala Pro Arg Asp Ile
 165 170 175
 Gln Ala Arg Met Arg Ile His Asn Asn Arg Val Gly Arg Gln Val Val
 180 185 190
 Thr Glu Asn Leu Lys Arg Lys Cys Lys Cys His Gly Thr Ser Gly Ser
 195 200 205
 Cys Gln Phe Lys Thr Cys Trp Arg Ala Ala Pro Glu Phe Arg Ala Val
 210 215 220
 Gly Ala Ala Leu Arg Glu Arg Val Gly Arg Ala Ile Phe Ile Asp Thr
 225 230 235 240
 His Asn Arg Asn Ser Gly Ala Phe Gln Pro Arg Leu Arg Pro Arg Arg
 245 250 255
 Leu Ser Gly Glu Leu Val Tyr Phe Glu Lys Ser Pro Asp Phe Cys Glu
 260 265 270
 Arg Asp Pro Thr Met Gly Ser Pro Gly Thr Arg Gly Arg Ala Cys Asn
 275 280 285
 Lys Thr Ser Arg Leu Leu Asp Gly Cys Gly Ser Leu Cys Cys Gly Arg
 290 295 300
 Gly His Asn Val Leu Arg Gln Thr Arg Val Glu Arg Cys His Cys Arg
 305 310 315 320

Phe His Trp Cys Cys Tyr Val Leu Cys Asp Glu Cys Lys Val Thr Glu
 325 330 335

Trp Val Asn Val Cys Lys
 340

<210> 23
 <211> 1196
 <212> DNA
 <213> Homo sapiens

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 gcttggttgc cgaaccagtg gctggcggcg gtgctcctca gcctgtgctg cctgctaccc 180
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 gcctggctga accggtcaag tattattttt gcgggagggtg ataagtggtc agtggatcct 360
 cgagtttcaa ttccaacatt gaataaaaag gactacagcc tccagataca gaatgtgat 420
 gtgacagatg atggcccata cactgtttct gttcagactc aacatacacc cagaacaatg 480
 cagggtgcac taactgtgca agttcctcct aagatatatg acatctcaaa tgatagacc 540
 gtcaatgaag gaaccaacgt cactcttact tgtttggcca ctgggaaacc agagccttcc 600
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 tcattcccag atgtgaggaa agtaaaagtt gttgtcaact ttgctcctac tattcaggaa 780
 attaaatctg gcaccgtgac ccccgagcgc agtggcctga taagatgtga aggtgcagggt 840
 gtgcgcgctc cagcctttga atggtacaaa ggagagaaga agctcttcaa tggccaacaa 900
 ggaattatta ttcaaaattt tagcacaaga tccattctca ctgttaccac cgtgacacag 960
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 ttctcctgct ggtaccttgt gttgacactg tctcttttca ccagcatatt ctacctgaag 1140
 aatgccattc tacaataaat tcaaaqaccc ataaaaggct tttaaggatt ctctga 1196

<210> 24
 <211> 354
 <212> PRT
 <213> Homo sapiens

<400> 24
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 Leu Ala Ala Val Leu Leu Ser Leu Cys Cys Leu Leu Pro Ser Cys Leu
 20 25 30
 Pro Ala Gly Gln Ser Val Asp Phe Pro Trp Ala Ala Val Asp Asn Met
 35 40 45
 Met Val Arg Lys Gly Asp Thr Ala Val Leu Arg Cys Tyr Leu Glu Asp
 50 55 60
 Gly Ala Ser Lys Gly Ala Trp Leu Asn Arg Ser Ser Ile Ile Phe Ala
 65 70 75 80

Gly Gly Asp Lys Trp Ser Val Asp Pro Arg Val Ser Ile Ser Thr Leu
 85 90 95

Asn Lys Arg Asp Tyr Ser Leu Gln Ile Gln Asn Val Asp Val Thr Asp
 100 105 110

Asp Gly Pro Tyr Thr Cys Ser Val Gln Thr Gln His Thr Pro Arg Thr
 115 120 125

Met Gln Val His Leu Thr Val Gln Val Pro Pro Lys Ile Tyr Asp Ile
 130 135 140

Ser Asn Asp Met Thr Val Asn Glu Gly Thr Asn Val Thr Leu Thr Cys
 145 150 155 160

Leu Ala Thr Gly Lys Pro Glu Pro Ser Ile Ser Trp Arg His Ile Ser
 165 170 175

Pro Ser Ala Lys Pro Phe Glu Asn Gly Gln Tyr Leu Asp Ile Tyr Gly
 180 185 190

Ile Thr Arg Asp Gln Ala Gly Glu Tyr Glu Cys Ser Ala Glu Asn Asp
 195 200 205

Val Ser Phe Pro Asp Val Arg Lys Val Lys Val Val Val Asn Phe Ala
 210 215 220

Pro Thr Ile Gln Glu Ile Lys Ser Gly Thr Val Thr Pro Gly Arg Ser
 225 230 235 240

Gly Leu Ile Arg Cys Glu Gly Ala Gly Val Pro Pro Pro Ala Phe Glu
 245 250 255

Trp Tyr Lys Gly Glu Lys Lys Leu Phe Asn Gly Gln Gln Gly Ile Ile
 260 265 270

Ile Gln Asn Phe Ser Thr Arg Ser Ile Leu Thr Val Thr Asn Val Thr
 275 280 285

Gln Glu His Phe Gly Asn Tyr Thr Cys Val Ala Ala Asn Lys Leu Gly
 290 295 300

Thr Thr Asn Ala Ser Leu Pro Leu Asn Pro Pro Ser Thr Ala Gln Tyr
 305 310 315 320

Gly Ile Thr Gly Ser Ala Asp Val Leu Phe Ser Cys Trp Tyr Leu Val
 325 330 335

Leu Thr Leu Ser Ser Phe Thr Ser Ile Phe Tyr Leu Lys Asn Ala Ile
 340 345 350

Leu Gln

210-25
 211-1165

<212> DNA
<213> Homo sapiens

<400> 25
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 ggggtgggg ggggtgcttc tcagcctgtg ctgctctgta cctctctgct tccgggtggg 180
 acagaqatgtg qacttccctt qgqcgccctt qgacaacatg atqgtcagaa aaqgqgacac 240
 qgcggtgctt aggtgttatt tgggaagatg agcttcaaag agtgcctggc tgaaccgggtc 300
 aaqtattatt tttcccaaaa atgataaqtg qtcagtqat cctcgaatct caatttcaac 360
 attgaataaa agggactaca gctctcagat acagaatgta gatgtgacag atgatggccc 420
 atacacgtgt tctgttcaga ctcaacatac acccagaaca atgcaggtgc atctaactgt 480
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 cgtcactctt acttgtttgg ccactgggaa accagagcct tccatttctt ggcgacacat 600
 ctccccatca gcaaaaacat ttgaaaatyy acaatatltg gacattlaty gaattacaag 660
 ggaccaggtt ggggaatatg aatgcagtg cggaaaatgat gtgtcattcc cagatgtgag 720
 qaaaagtaaaa gttgttgta actttgctcc tactattcag gaaattaaat ctggcaccgt 780
 gacccccgga cgcagtgccc tgataagatg tgaaggtgca ggtgtgccgc ctccagcctt 840
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 ttttagcaca agatccattc tcaactgttac caacgtgaca caggagcact tcggcaatta 960
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<210> 26
<211> 354
<212> PRT
<213> Homo sapiens

<400> 26
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 Pro Ala Gly Gln Ser Val Asp Phe Pro Trp Ala Ala Val Asp Asn Met
 35 40 45
 Met Val Arg Lys Gly Asp Thr Ala Val Leu Arg Cys Tyr Leu Glu Asp
 50 55 60
 Gly Ala Ser Lys Gly Ala Trp Leu Asn Arg Ser Ser Ile Ile Phe Ala
 65 70 75 80
 Gly Gly Asp Lys Trp Ser Val Asp Pro Arg Val Ser Ile Ser Thr Leu
 85 90 95
 Asn Lys Arg Asp Tyr Ser Leu Gln Ile Gln Asn Val Asp Val Thr Asp
 100 105 110
 Asp Gly Pro Tyr Thr Cys Ser Val Gln Thr Gln His Thr Pro Arg Thr
 115 120 125
 Met Gln Val His Leu Thr Val Gln Val Pro Pro Lys Ile Tyr Asp Ile

130										135					140				
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Leu	Ala	Thr	Gly	Lys	Pro	Glu	Pro	Ser	Ile	Ser	Trp	Arg	His	Ile	Ser				
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Pro	Ser	Ala	Lys	Pro	Phe	Glu	Asn	Gly	Gln	Tyr	Leu	Asp	Ile	Tyr	Gly				
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Ile	Thr	Arg	Asp	Gln	Ala	Gly	Glu	Tyr	Glu	Cys	Ser	Ala	Glu	Asn	Asp				
		195					200					205							
Val	Ser	Phe	Pro	Asp	Val	Arg	Lys	Val	Lys	Val	Val	Val	Asn	Phe	Ala				
	210					215						220							
Pro	Thr	Ile	Gln	Glu	Ile	Lys	Ser	Gly	Thr	Val	Thr	Pro	Gly	Arg	Ser				
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Gly	Leu	Ile	Arg	Cys	Glu	Gly	Ala	Gly	Val	Pro	Pro	Pro	Ala	Phe	Glu				
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Trp	Tyr	Lys	Gly	Glu	Lys	Lys	Leu	Phe	Asn	Gly	Gln	Gln	Gly	Ile	Ile				
		260						265						270					
Ile	Gln	Asn	Phe	Ser	Thr	Arg	Ser	Ile	Leu	Thr	Val	Thr	Asn	Val	Thr				
		275					280					285							
Gln	Glu	His	Phe	Gly	Asn	Tyr	Thr	Cys	Val	Ala	Ala	Asn	Lys	Leu	Gly				
	290					295					300								
Thr	Thr	Asn	Ala	Ser	Leu	Pro	Leu	Asn	Pro	Pro	Ser	Thr	Ala	Gln	Tyr				
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Gly	Ile	Thr	Gly	Ser	Ala	Asp	Val	Leu	Phe	Ser	Cys	Trp	Tyr	Leu	Val				
			325						330					335					
Leu	Thr	Leu	Ser	Ser	Phe	Thr	Ser	Ile	Phe	Tyr	Leu	Lys	Asn	Ala	Ile				
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Leu Gln

<210> 27

<211> 2069

<212> DNA

<213> Homo sapiens

<400> 27

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<210> 28

<211> 534

<212> PRT

<213> Homo sapiens

<400> 28

Met Gly Val Thr Pro His His Val Cys Arg Pro Pro Gly Asn Val Ser
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Gln Val Val Phe His Asn His Ser Asn Trp Ser Leu Glu Asp Thr Gly
20 25 30

Ala Leu Leu Ser Ser Gly Gln Lys Asp Tyr Val Thr Val Gln Leu Gln
35 40 45

Asn Gly Glu Ile Trp Glu Leu Ser Arg Cys Ser Arg Asn Lys Arg Glu
50 55 60

Asn Thr Ser Ser Leu Gly Tyr Glu Tyr Thr Gly Ser Lys Lys Glu Phe
65 70 75 80

Pro Cys Val Asp Gly Tyr Ile Tyr Asp Gln Asn Thr Trp Lys Ser Thr
85 90 95

Ala Val Thr Gln Trp Asn Leu Val Cys Asp Arg Lys Trp Leu Ala Met
100 105 110

Leu Ile Gln Pro Leu Phe Met Phe Gly Val Leu Leu Gly Ser Val Thr
 115 120 125
 Phe Gly Tyr Phe Ser Asp Arg Leu Gly Arg Arg Val Val Leu Trp Ala
 130 135 140
 Thr Ser Ser Ser Met Phe Leu Phe Glv Ile Ala Ala Ala Phe Ala Val
 145 150 155 160
 Asp Tyr Tyr Thr Phe Met Ala Ala Arg Phe Phe Leu Ala Met Val Ala
 165 170 175
 Ser Gly Tyr Leu Val Val Gly Phe Val Tyr Val Met Glu Phe Ile Gly
 180 185 190
 Met Lys Ser Arg Thr Trp Ala Ser Val His Leu His Ser Phe Phe Ala
 195 200 205
 Val Gly Thr Leu Leu Val Ala Leu Thr Gly Tyr Leu Val Arg Thr Trp
 210 215 220
 Trp Leu Tyr Gln Met Ile Leu Ser Thr Val Thr Val Pro Phe Ile Leu
 225 230 235 240
 Cys Cys Trp Val Leu Pro Glu Thr Pro Phe Trp Leu Leu Ser Glu Gly
 245 250 255
 Arg Tyr Glu Glu Ala Gln Lys Ile Val Asp Ile Met Ala Lys Trp Asn
 260 265 270
 Arg Ala Ser Ser Cys Lys Leu Ser Glu Leu Leu Ser Leu Asp Leu Gln
 275 280 285
 Gly Pro Val Ser Asn Ser Pro Thr Glu Val Gln Lys His Asn Leu Ser
 290 295 300
 Tyr Leu Phe Tyr Asn Trp Ser Ile Thr Lys Arg Thr Leu Thr Val Trp
 305 310 315 320
 Leu Ile Trp Phe Thr Gly Ser Leu Gly Phe Tyr Ser Phe Ser Leu Asn
 325 330 335
 Ser Val Asn Leu Gly Gly Asn Glu Tyr Leu Asn Leu Phe Leu Leu Gly
 340 345 350
 Val Val Glu Ile Pro Ala Tyr Thr Phe Val Cys Ile Ala Met Asp Lys
 355 360 365
 Val Gly Arg Arg Thr Val Leu Ala Tyr Ser Leu Phe Cys Ser Ala Leu
 370 375 380
 Ala Cys Glv Val Val Met Val Ile Pro Gln Lys His Tyr Ile Leu Gly
 385 390 395 400
 Val Val Thr Ala Met Val Gly Lys Phe Ala Ile Gly Ala Ala Phe Gly
 405 410 415

Leu Ile Tyr Leu Tyr Thr Ala Glu Leu Tyr Pro Thr Ile Val Arg Ser
420 425 430

Leu Ala Val Gly Ser Gly Ser Met Val Cys Arg Leu Ala Ser Ile Leu
435 440 445

Ala Pro Phe Ser Val Asp Leu Ser Ser Ile Trp Ile Phe Ile Pro Gln
450 455 460

Leu Phe Val Gly Thr Met Ala Leu Leu Ser Gly Val Leu Thr Leu Lys
465 470 475 480

Leu Pro Glu Thr Leu Gly Lys Arg Leu Ala Thr Thr Trp Glu Glu Ala
485 490 495

Ala Lys Leu Glu Ser Glu Asn Glu Ser Lys Ser Ser Lys Leu Leu Leu
500 505 510

Thr Thr Asn Asn Ser Gly Leu Glu Lys Thr Glu Ala Ile Thr Pro Arg
515 520 525

Asp Ser Gly Leu Gly Glu
530

<210> 29

<211> 1666

<212> DNA

<213> Homo sapiens

<400> 29

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gaataactta	acctctctct	cacagggtga	gtggaaaattc	ccgctacac	cttcgtgtgc	1140
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<212> PRT

<213> Homo sapiens

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Asn Gly Glu Ile Trp Glu Leu Ser Arg Cys Ser Arg Asn Lys Arg Glu
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Asn Thr Ser Ser Leu Gly Tyr Glu Tyr Thr Gly Ser Lys Lys Glu Phe
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Pro Cys Val Asp Gly Tyr Ile Tyr Asp Gln Asn Thr Trp Lys Ser Thr
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Ala Val Thr Gln Trp Asn Leu Val Cys Asp Arg Lys Trp Leu Ala Met
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Leu Ile Gln Pro Leu Phe Met Phe Gly Val Leu Leu Gly Ser Val Thr
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Phe Gly Tyr Phe Ser Asp Arg Leu Phe Cys Leu Tyr Val Ile Cys Asn
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Gly Val Arg Leu Leu Asn Ser Tyr Lys Cys Asp Leu Glu Tyr Lys Ser
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Leu Leu Phe Val Phe Gln Val Ala Ser Gly Tyr Leu Val Val Gly Phe
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Val Tyr Val Met Glu Phe Ile Gly Met Lys Ser Arg Thr Trp Ala Ser
 180 185 190

Val His Leu His Ser Phe Phe Ala Val Gly Thr Leu Leu Val Ala Leu
 195 200 205

Thr Gly Tyr Leu Val Arg Thr Trp Trp Leu Tyr Gln Met Ile Leu Ser
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Thr Val Thr Val Pro Phe Ile Leu Cys Cys Trp Val Leu Pro Glu Thr
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Pro Phe Trp Leu Leu Ser Glu Gly Arg Tyr Glu Glu Ala Gln Lys Ile

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211> 1192
212> DNA

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<213> Homo sapiens

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<211> 343

<212> PRT

<213> Homo sapiens

<400> 32

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Tyr Lys Gln Val Ala Glu Val Asn Leu Trp Gly Thr Val Arg Met Thr
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Lys Ser Phe Leu Pro Leu Ile Arg Arg Ala Lys Gly Arg Val Val Asn
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Ile Ser Ser Met Leu Gly Arg Met Ala Asn Pro Ala Arg Ser Pro Tyr
195 200 205

Cys Ile Thr Lys Phe Gly Val Glu Ala Phe Ser Asp Cys Leu Arg Tyr
210 215 220

Glu Met Tyr Pro Leu Gly Val Lys Val Ser Val Val Glu Pro Gly Asn
225 230 235 240

Phe Ile Ala Ala Thr Ser Leu Tyr Ser Pro Glu Ser Ile Gln Ala Ile
245 250 255

Ala Lys Lys Met Trp Glu Glu Leu Pro Glu Val Val Arg Lys Asp Tyr
260 265 270

Gly Lys Lys Tyr Phe Asp Glu Lys Ile Ala Lys Met Glu Thr Tyr Cys
275 280 285

Ser Ser Gly Ser Thr Asp Thr Ser Pro Val Ile Asp Ala Val Thr His
290 295 300

Ala Leu Thr Ala Thr Thr Pro Tyr Thr Arg Tyr His Pro Met Asp Tyr
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Tyr Trp Trp Leu Arg Met Gln Ile Met Thr His Leu Pro Gly Ala Ile
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Ser Asp Met Ile Tyr Ile Arg
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<210> 33

<211> 1166

<212> DNA

<213> Homo sapiens

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 <211> 343
 <212> PRT
 <213> Homo sapiens

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 35 40 45

Ala Ala Glu Pro Val Gly Ser Lys Ala Val Leu Val Thr Gly Cys Asp
 50 55 60

Ser Gly Phe Gly Phe Ser Leu Ala Lys His Leu His Ser Lys Gly Phe
 65 70 75 80

Leu Val Phe Ala Gly Cys Leu Met Lys Asp Lys Gly His Asp Gly Val
 85 90 95

Lys Glu Leu Asp Ser Leu Asn Ser Asp Arg Leu Arg Thr Val Gln Leu
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Asn Val Cys Ser Ser Glu Glu Val Glu Lys Val Val Glu Ile Val Arg
 115 120 125

Ser Ser Leu Lys Asp Pro Glu Lys Gly Met Trp Gly Leu Val Asn Asn
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Ala Gly Ile Ser Thr Phe Gly Glu Val Glu Phe Thr Ser Leu Glu Thr
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Tyr Lys Gln Val Ala Glu Val Asn Leu Trp Gly Thr Val Arg Met Thr
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Lys Ser Phe Leu Pro Leu Ile Arg Arg Ala Lys Gly Arg Val Val Asn
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Ile Ser Ser Met Leu Gly Arg Met Ala Asn Pro Ala Arg Ser Pro Tyr
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Cys Ile Thr Lys Phe Gly Val Glu Ala Phe Ser Asp Cys Leu Arg Tyr
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Glu Met Tyr Pro Leu Gly Val Lys Val Ser Val Val Glu Pro Gly Asn
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Phe Ile Ala Ala Thr Ser Leu Tyr Ser Pro Glu Ser Ile Gln Ala Ile
245 250 255

Ala Lys Lys Met Trp Glu Glu Leu Pro Glu Val Val Arg Lys Asp Tyr
260 265 270

Gly Lys Lys Tyr Phe Asp Glu Lys Ile Ala Lys Met Glu Thr Tyr Cys
275 280 285

Ser Ser Gly Ser Thr Asp Thr Ser Pro Val Ile Asp Ala Val Thr His
290 295 300

Ala Leu Thr Ala Thr Thr Pro Tyr Thr Arg Tyr His Pro Met Asp Tyr
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<211> 2725

<212> PRT

<213> Homo sapiens

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Gly	Thr	Gly	Thr	Thr	Pro	Leu	Phe	Ser	Thr	Ala	Thr	Pro	Gly	Trp	Thr	260	265	270	
Met	Ala	Ser	Gly	Ser	Val	Tyr	Ser	Pro	Pro	Thr	Arg	Pro	Leu	Pro	Arg	275	280	285	
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Asn	Trp	Gln	Leu	Gln	Gln	Thr	Glu	Asn	Asp	Thr	Phe	Glu	Asn	Gly	Lys	340	345	350	
Val	Asn	Ser	Asp	Thr	Met	Pro	Thr	Asn	Thr	Val	Ser	Leu	Pro	Ser	Gly	355	360	365	
Asp	Asn	Gly	Lys	Leu	Gly	Gly	Phe	Thr	Gln	Glu	Asn	Asn	Thr	Ile	Asp	370	375	380	
Ser	Gly	Glu	Leu	Asp	Ile	Gly	Arg	Arg	Ala	Ile	Gln	Glu	Ile	Pro	Pro	385	390	395	400
Gly	Ile	Phe	Trp	Arg	Ser	Gln	Leu	Phe	Ile	Asp	Gln	Pro	Gln	Phe	Leu	405	410	415	
Lys	Phe	Asn	Ile	Ser	Leu	Gln	Lys	Asp	Ala	Leu	Ile	Gly	Val	Tyr	Gly	420	425	430	
Arg	Lys	Lys	Leu	Pro	Pro	Ser	His	Thr	Gln	Ser	Ser	Pro	Gln	Tyr	Asp	435	440	445	
Phe	Val	Glu	Leu	Leu	Asp	Gly	Ser	Arg	Leu	Ile	Ala	Arg	Glu	Gln	Arg	450	455	460	
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Cys Arg Val Pro Thr Gln Lys Ser Tyr Ser Ser Ser Glu Thr Leu Lys
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Ala Phe Asp His Asp Ser Ser Arg Leu Leu Tyr Gly Asn Arg Val Lys
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Asp Leu Val His Arg Glu Ala Asp Glu Phe Thr Arg Gln Gly Gln Asn
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Phe Thr Leu Arg Gln Leu Gly Val Cys Glu Pro Ala Thr Arg Arg Gly
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Leu Ala Phe Cys Ala Glu Met Gly Leu Pro His Arg Gly Tyr Ser Ile
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Gln Gly Gln Ser Thr Leu Gln Pro Leu Pro Pro Ser His Lys Gln His
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Leu Gly Ser Asn Val Pro Leu Glu Ser Arg His Phe Leu Phe Lys Thr
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Phe Pro Thr Gly Val Val Thr Asn Leu His Gly Asp Met Asp Lys Ala 1665 1670 1675 1680		
Ile Thr Val Asp Ile Glu Ser Ser Ser Arg Glu Glu Asp Val Ser Ile 1685 1690 1695		
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Gln Leu Arg Asn Ser Tyr Gln Ile Gly Tyr Asp Gly Ser Leu Arg Ile 1715 1720 1725		
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Lys Ser Met Val Leu Leu Leu His Ser Gln Arg Gln Tyr Ile Phe Glu 1890 1895 1900		
Tyr Asp Met Trp Asp Arg Leu Ser Ala Ile Thr Met Pro Ser Val Ala 1905 1910 1915 1920		
Arg His Thr Met Gln Thr Ile Arg Ser Ile Gly Tyr Tyr Arg Asn Ile 1925 1930 1935		
Tyr Asn Pro Pro Glu Ser Asn Ala Ser Ile Ile Thr Asp Tyr Asn Glu 1940 1945 1950		
Glu Gly Leu Leu Leu Gln Thr Ala Phe Leu Gly Thr Ser Arg Arg Val 1955 1960 1965		
Leu Phe Lys Tyr Arg Arg Gln Thr Arg Leu Ser Glu Ile Leu Tyr Asp 1970 1975 1980		
Ser Thr Arg Val Ser Phe Thr Tyr Asp Glu Thr Ala Gly Val Leu Lys 1985 1990 1995 2000		
Thr Val Asn Leu Gln Ser Asp Gly Phe Ile Cys Thr Ile Arg Tyr Arg 2005 2010 2015		
Gln Ile Gly Pro Leu Ile Asp Arg Gln Ile Phe Arg Phe Ser Glu Asp 2020 2025 2030		
Gly Met Val Asn Ala Arg Phe Asp Tyr Ser Tyr Asp Asn Ser Phe Arg 2035 2040 2045		
Val Thr Ser Met Gln Gly Val Ile Asn Glu Thr Pro Leu Pro Ile Asp 2050 2055 2060		
Leu Tyr Gln Phe Asp Asp Ile Ser Gly Lys Val Glu Gln Phe Gly Lys 2065 2070 2075 2080		
Phe Gly Val Ile Tyr Tyr Asp Ile Asn Gln Ile Ile Ser Thr Ala Val 2085 2090 2095		
Met Thr Tyr Thr Lys His Phe Asp Ala His Gly Arg Ile Lys Glu Ile		

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Asp Asn Met Gly Arg Val Thr Lys Arg Glu Ile Lys Ile Gly Pro Phe 2130 2135 2140		
Ala Asn Thr Thr Lys Tyr Ala Tyr Glu Tyr Asp Val Asp Gly Gln Leu 2145 2150 2155 2160		
Gln Thr Val Tyr Leu Asn Glu Lys Ile Met Trp Arg Tyr Asn Tyr Asp 2165 2170 2175		
Leu Asn Gly Asn Leu His Leu Leu Asn Pro Ser Asn Ser Ala Arg Leu 2180 2185 2190		
Thr Pro Leu Arg Tyr Asp Leu Arg Asp Arg Ile Thr Arg Leu Gly Asp 2195 2200 2205		
Val Gln Tyr Arg Leu Asp Glu Asp Gly Phe Leu Arg Gln Arg Gly Thr 2210 2215 2220		
Glu Ile Phe Glu Tyr Ser Ser Lys Gly Leu Leu Thr Arg Val Tyr Ser 2225 2230 2235 2240		
Lys Gly Ser Gly Trp Thr Val Ile Tyr Arg Tyr Asp Gly Leu Gly Arg 2245 2250 2255		
Arg Val Ser Ser Lys Thr Ser Leu Gly Gln His Leu Gln Phe Phe Tyr 2260 2265 2270		
Ala Asp Leu Thr Tyr Pro Thr Arg Ile Thr His Val Tyr Asn His Ser 2275 2280 2285		
Ser Ser Glu Ile Thr Ser Leu Tyr Tyr Asp Leu Gln Gly His Leu Phe 2290 2295 2300		
Ala Met Glu Ile Ser Ser Gly Asp Glu Phe Tyr Ile Ala Ser Asp Asn 2305 2310 2315 2320		
Thr Gly Thr Pro Leu Ala Val Phe Ser Ser Asn Gly Leu Met Leu Lys 2325 2330 2335		
Gln Ile Gln Tyr Thr Ala Tyr Gly Glu Ile Tyr Phe Asp Ser Asn Ile 2340 2345 2350		
Asp Phe Gln Leu Val Ile Gly Phe His Gly Gly Leu Tyr Asp Pro Leu 2355 2360 2365		
Thr Lys Leu Ile His Phe Gly Glu Arg Asp Tyr Asp Ile Leu Ala Gly 2370 2375 2380		
Arg Trp Thr Thr Pro Asp Ile Glu Ile Trp Lys Arg Ile Gly Lys Asp 2385 2390 2395 2400		
Pro Ala Pro Phe Asn Leu Tyr Met Phe Arg Asn Asn Asn Pro Ala Ser		

2405	2410	2415
Lys Ile His Asp Val 2420	Lys Asp Tyr Ile Thr Asp Val 2425	Asn Ser Trp Leu 2430
Val Thr Phe Gly Phe His Leu 2435	His Asn Ala Ile Pro Gly Phe 2440	Pro Val 2445
Pro Lys Phe Asp Leu Thr Glu 2450	Pro Ser Tyr Glu Leu Val 2455	Lys Ser Gln 2460
Gln Trp Asp Asp Ile Pro Pro Ile 2465	Phe Gly Val Gln Gln Gln Val 2470	Ala 2475
Arg Gln Ala Lys Ala Phe Leu Ser 2485	Leu Gly Lys Met Ala Glu Val 2490	Gln 2495
Val Ser Arg Arg Arg Ala Gly 2500	Gly Ala Gln Ser Trp Leu Trp 2505	Phe Ala 2510
Thr Val Lys Ser Leu Ile Gly 2515	Lys Gly Val Met Leu Ala Val 2520	Ser Gln 2525
Gly Arg Val Gln Thr Asn Val 2530	Leu Asn Ile Ala Asn Glu Asp 2535	Cys Ile 2540
Lys Val Ala Ala Val Leu Asn 2545	Asn Ala Phe Tyr Leu Glu Asn 2550	Leu His 2555
Phe Thr Ile Glu Gly Lys Asp 2565	Thr His Tyr Phe Ile Lys Thr 2570	Thr Thr 2575
Pro Glu Ser Asp Leu Gly Thr 2580	Leu Arg Leu Thr Ser Gly Arg 2585	Lys Ala 2590
Leu Glu Asn Gly Ile Asn Val 2595	Thr Val Ser Gln Ser Thr Thr 2600	Val Val 2605
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Leu Ala Leu His Val Arg Tyr 2625	Gly Met Thr Leu Asp Glu Glu 2630	Lys Ala 2635
Arg Ile Leu Glu Gln Ala Arg 2645	Gln Arg Ala Leu Ala Arg Ala 2650	Trp Ala 2655
Arg Glu Gln Gln Arg Val Arg 2660	Asp Gly Glu Glu Gly Ala Arg 2665	Leu Trp 2670
Thr Glu Gly Glu Lys Arg Gln 2675	Leu Leu Ser Ala Gly Lys Val 2680	Gln Gly 2685
Tyr Asp Gly Tyr Tyr Val Leu 2690	Ser Val Glu Gln Tyr Pro Gln 2695	Leu Ala 2700
Arg Ser Ala Asn Asn Ile Gln 2705	Phe Leu Arg Gln Ser Glu Ile 2710	Gly Arg 2715

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Arg Glu Lys Glu Arg Arg Tyr Thr Asn Ser Ser Ala Asp Asn Glu Glu

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Cys Arg Val Pro Thr Gln Lys Ser Tyr Ser Ser Ser Glu Thr Leu Lys

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 Asn Ser Leu Thr Asn Arg Arg Asn Gln Ser Pro Ala Pro Pro Ala Ala
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 Thr Ile Asp Ser Gly Glu Leu Asp Ile Gly Arg Arg Ala Ile Gln Glu
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 ctacttttaa aaaaaaaaaa aaaaaaaq 8487

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<212> PRT

<213> Homo sapiens

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Cys Arg Val Pro Thr Gln Lys Ser Tyr Ser Ser Ser Glu Thr Leu Lys
 35 40 45

Ala Phe Asp His Asp Ser Ser Arg Leu Leu Tyr Gly Asn Arg Val Lys
 50 55 60

Asp Leu Val His Arg Glu Ala Asp Glu Phe Thr Arg Gln Glu Gln Pro
 65 70 75 80

Ala Ser Asn Gln Gly Gln Ser Thr Leu Gln Pro Leu Pro Pro Ser His
 85 90 95

Lys Gln His Ser Ala Gln His His Pro Ser Ile Thr Ser Leu Asn Arg
 100 105 110

Asn Ser Leu Thr Asn Arg Arg Asn Gln Ser Pro Ala Pro Pro Ala Ala
 115 120 125

Leu Pro Ala Glu Leu Gln Thr Thr Pro Glu Ser Val Gln Leu Gln Asp
 130 135 140

Ser Trp Val Leu Gly Ser Asn Val Pro Leu Glu Ser Arg His Phe Leu
 145 150 155 160

Phe Lys Thr Gly Thr Gly Thr Thr Pro Leu Phe Ser Thr Ala Thr Pro
 165 170 175

Gly Tyr Thr Met Ala Ser Gly Ser Val Tyr Ser Pro Pro Thr Arg Pro
 180 185 190

Leu Pro Arg Asn Thr Leu Ser Arg Ser Ala Phe Lys Phe Lys Lys Ser
 195 200 205

Ser Lys Tyr Cys Ser Trp Lys Cys Thr Ala Leu Cys Ala Val Gly Val
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Ser Val Leu Leu Ala Ile Leu Leu Ser Tyr Phe Ile Ala Met His Leu
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 Phe Gly Leu Asn Trp Gln Leu Gln Gln Thr Glu Asn Asp Thr Phe Glu
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 Asn Gly Lys Val Asn Ser Asp Thr Met Pro Thr Asn Thr Val Ser Leu
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 Pro Ser Gly Asp Asn Gly Lys Leu Gly Gly Phe Thr Gln Glu Asn Asn
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 Ile Pro Pro Gly Ile Phe Trp Arg Ser Gln Leu Phe Ile Asp Gln Pro
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 Gln Phe Leu Lys Phe Asn Ile Ser Leu Gln Lys Asp Ala Leu Ile Gly
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 Leu Leu Glu Thr Glu Arg Ala Gly Arg Gln Ala Arg Ser Val Ser Leu
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 His Glu Ala Gly Phe Ile Gln Tyr Leu Asp Ser Gly Ile Trp His Leu
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 Ile Val Ile Glu Ser Val Val Glu Cys Pro Arg Asn Cys His Gly Asn
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 Gly Glu Cys Val Ser Gly Thr Cys His Cys Phe Pro Gly Phe Leu Gly
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 Gln Tyr Ser Lys Gly Arg Cys Leu Cys Phe Ser Gly Trp Lys Gly Thr
 465 470 475 480
 Glu Cys Asp Val Pro Thr Thr Gln Cys Ile Asp Pro Gln Cys Gly Gly
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 Arg Gly Ile Cys Ile Met Gly Ser Cys Ala Cys Asn Ser Gly Tyr Lys
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 Gly Glu Ser Cys Glu Glu Ala Asp Cys Ile Asp Pro Gly Cys Ser Asn
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His Gly Val Cys Ile His Gly Glu Cys His Cys Ser Pro Gly Trp Gly
 530 535 540
 Gly Ser Asn Cys Glu Ile Leu Lys Thr Met Cys Pro Asp Gln Cys Ser
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 Gly His Glv Thr Tyr Leu Gln Glu Ser Glv Ser Cys Thr Cys Asp Pro
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 645 650 655
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 Pro Gly Trp Arg Gly Ala Gly Cys Asp Val Ala Met Glu Thr Leu Cys
 675 680 685
 Thr Asp Ser Lys Asp Asn Glu Gly Asp Gly Leu Ile Asp Cys Met Asp
 690 695 700
 Pro Asp Cys Cys Leu Gln Ser Ser Cys Gln Asn Gln Pro Tyr Cys Arg
 705 710 715 720
 Gly Leu Pro Asp Pro Gln Asp Ile Ile Ser Gln Ser Leu Gln Ser Pro
 725 730 735
 Ser Gln Gln Ala Ala Lys Ser Phe Tyr Asp Arg Ile Ser Phe Leu Ile
 740 745 750
 Gly Ser Asp Ser Thr His Val Ile Pro Gly Glu Ser Pro Phe Asn Lys
 755 760 765
 Ser Leu Ala Ser Val Ile Arg Gly Gln Val Leu Thr Ala Asp Gly Thr
 770 775 780
 Pro Leu Ile Gly Val Asn Val Ser Phe Phe His Tyr Pro Glu Tyr Gly
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 Gly Ala Ser Leu Thr Leu Val Phe Glu Arg Ser Pro Phe Leu Thr Gln
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Tyr His Thr Val Trp Ile Pro Trp Asn Val Phe Tyr Val Met Asp Thr
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 Leu Val Met Glu Lys Glu Glu Asn Asp Ile Pro Ser Cys Asp Leu Ser
 850 855 860
 Gly Phe Val Arg Pro Asn Pro Ile Ile Val Ser Ser Pro Leu Ser Thr
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 Phe Phe Arg Ser Ser Pro Glu Asp Ser Pro Ile Ile Pro Glu Thr Gln
 885 890 895
 Val Leu His Glu Glu Thr Thr Ile Pro Gly Thr Asp Leu Lys Leu Ser
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 Tyr Leu Ser Ser Arg Ala Ala Gly Tyr Lys Ser Val Leu Lys Ile Thr
 915 920 925
 Met Thr Gln Ser Ile Ile Pro Phe Asn Leu Met Lys Val His Leu Met
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 Val Ala Val Val Gly Arg Leu Phe Gln Lys Trp Phe Pro Ala Ser Pro
 945 950 955 960
 Asn Leu Ala Tyr Thr Phe Ile Trp Asp Lys Thr Asp Ala Tyr Asn Gln
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 Lys Val Tyr Gly Leu Ser Glu Ala Val Val Ser Val Gly Tyr Glu Tyr
 980 985 990
 Glu Ser Cys Leu Asp Leu Thr Leu Trp Glu Lys Arg Thr Ala Ile Leu
 995 1000 1005
 Gln Gly Tyr Glu Leu Asp Ala Ser Asn Met Gly Gly Trp Thr Leu Asp
 1010 1015 1020
 Lys His His Val Leu Asp Val Gln Asn Gly Ile Leu Tyr Lys Gly Asn
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 Gly Glu Asn Gln Phe Ile Ser Gln Gln Pro Pro Val Val Ser Ser Ile
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 Phe Pro Ser Gly Asn Val Thr Ser Val Leu Glu Leu Arg Asn Lys Asp
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 Tyr Arg Pro Lys Ser Leu Thr Gly Ala Lys Asp Leu Thr Lys Asn Ala
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 Met His Ile Ser Gln Val Arg Leu Glu Trp Pro Thr Asp Leu Ala Ile
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 His Cys Gln Val Pro Gly Val Glu Tyr Pro Val Gly Lys His Ala Val
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 Val Leu Tyr Ile Thr Glu Thr Asp Glu Lys Lys Ile Asn Arg Ile Arg
 1330 1335 1340
 Gln Val Thr Thr Asp Gly Glu Ile Ser Leu Val Ala Gly Ile Pro Ser
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 Glu Cys Asp Cys Lys Asn Asp Ala Asn Cys Asp Cys Tyr Gln Ser Gly
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 Asp Gly Tyr Ala Lys Asp Ala Lys Leu Ser Ala Pro Ser Ser Leu Ala
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 Ala Ser Pro Asp Gly Thr Leu Tyr Ile Ala Asp Leu Gly Asn Ile Arg
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 Tyr Glu Val Ala Ser Pro Thr Asp Gln Glu Leu Tyr Ile Phe Asp Ile
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Asn Gly Thr His Gln Tyr Thr Val Ser Leu Val Thr Gly Asp Tyr Leu
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 1460 1465 1470
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 1665 1670 1675 1680
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 Thr Lys Thr Glu Lys Ile Tyr Asp Asp His Arg Lys Phe Leu Leu Arg
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 Lys Leu Met Ala Val Asn Val Thr Tyr Ser Ser Thr Gly Gln Ile Ala
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Ser Ile Gln Arg Gly Thr Thr Ser Glu Lys Val Asp Tyr Asp Gly Gln
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 Gly Arg Ile Val Ser Arg Val Phe Ala Asp Gly Lys Thr Trp Ser Tyr
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 1905 1910 1915 1920
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 1940 1945 1950
 Leu Pro Ile Asp Leu Tyr Gln Phe Asp Asp Ile Ser Gly Lys Val Glu
 1955 1960 1965
 Gln Phe Gly Lys Phe Gly Val Ile Tyr Tyr Asp Ile Asn Gln Ile Ile
 1970 1975 1980
 Ser Thr Ala Val Met Thr Tyr Thr Lys His Phe Asp Ala His Gly Arg
 1985 1990 1995 2000
 Ile Lys Glu Ile Gln Tyr Glu Ile Phe Arg Ser Leu Met Tyr Trp Ile
 2005 2010 2015
 Thr Ile Gln Tyr Asp Asn Met Gly Arg Val Thr Lys Arg Glu Ile Lys
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 Tyr Asn His Ser Ser Ser Glu Ile Thr Ser Leu Tyr Tyr Asp Leu Gln
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 Leu Met Leu Lys Gln Ile Gln Tyr Thr Ala Tyr Gly Glu Ile Tyr Phe
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Val Lys Ser Gln Gln Trp Asp Asp Ile Pro Pro Ile Phe Gly Val Gln
 2355 2360 2365
 Gln Gln Val Ala Arg Gln Ala Lys Ala Phe Leu Ser Leu Gly Lys Met
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 Ala Glu Val Gln Val Ser Arg Arg Arg Ala Gly Gly Ala Gln Ser Trp
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 Glu Asn Leu His Phe Thr Ile Glu Gly Lys Asp Thr His Tyr Phe Ile
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 Lys Thr Thr Thr Pro Glu Ser Asp Leu Gly Thr Leu Arg Leu Thr Ser
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 Thr Thr Val Val Asn Gly Arg Thr Arg Arg Phe Ala Asp Val Glu Met
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 Gln Phe Gly Ala Leu Ala Leu His Val Arg Tyr Gly Met Thr Leu Asp
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 Ala Arg Leu Trp Thr Glu Gly Glu Lys Arg Gln Leu Leu Ser Ala Gly
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 Pro Glu Leu Ala Asp Ser Ala Asn Asn Ile Gln Phe Leu Arg Gln Ser
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 • 211 956
 • 212 DNA
 • 213 Homo sapiens

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165

170

175

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195 200 205

Ser Glu Gly Val Asp Leu Ile Asp Asn Pro Val Ile Lys Arg Ile Ala
210 215 220

Lys Glu His Gly Lys Ser Pro Ala Gln Ile Leu Ile Arg Phe Gln Ile
225 230 235 240

Gln Arg Asn Val Ile Val Ile Pro Gly Ser Ile Thr Pro Ser His Ile
245 250 255

Lys Glu Asn Ile Gln Val Phe Asp Phe Glu Leu Thr Gln His Asp Met
260 265 270

Asp Asn Ile Leu Ser Leu Asn Arg Asn Leu Arg Leu Ala Met Phe Pro
275 280 285

Arg Thr Lys Asn His Lys Asp Tyr Pro Phe His Ile Glu Tyr
290 295 300

<210> 45

<211> 875

<212> DNA

<213> Homo sapiens

<400> 45

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<210> 46

<211> 251

<212> FET

<213> Homo sapiens

<400> 46

Met Gly Asp Ile Phe Ala Val Gly Leu Ser Ser Thr Lys Gln Ala Ser

1	5	10	15
Pro Gly Lys Val Thr Glu Ala Val Lys Glu Ala Ile Asp Ala Gly Tyr	20	25	30
Arg His Phe Asp Cys Ala Tyr Phe Tyr His Asn Glu Arg Glu Val Gly	35	40	45
Ala Gly Ile Arg Cys Lys Ile Lys Glu Gly Ala Val Arg Arg Glu Asp	50	55	60
Leu Phe Ile Ala Thr Lys Leu Trp Cys Thr Cys His Lys Lys Ser Leu	65	70	75
Val Glu Thr Ala Cys Arg Lys Gly Leu Lys Ala Leu Lys Leu Asn Tyr	85	90	95
Leu Asp Leu Tyr Leu Ile His Trp Pro Met Gly Phe Lys Pro Pro His	100	105	110
Pro Glu Trp Ile Met Ser Cys Ser Glu Leu Ser Phe Cys Leu Ser His	115	120	125
Pro Arg Val Gln Asp Leu Pro Leu Asp Glu Ser Asn Met Val Ile Pro	130	135	140
Ser Asp Thr Asp Phe Leu Asp Thr Trp Glu Ala Met Glu Asp Leu Val	145	150	155
Ile Thr Gly Leu Val Lys Asn Ile Gly Val Ser Asn Phe Asn His Glu	165	170	175
Gln Leu Glu Arg Leu Leu Asn Lys Pro Gly Leu Arg Phe Lys Pro Leu	180	185	190
Thr Asn Gln Ile Leu Ile Arg Phe Gln Ile Gln Arg Asn Val Ile Val	195	200	205
Ile Pro Gly Ser Ile Thr Pro Ser His Ile Lys Glu Asn Ile Gln Val	210	215	220
Phe Asp Phe Glu Leu Thr Gln His Asp Met Asp Asn Ile Leu Ser Leu	225	230	235
Asn Arg Asn Leu Arg Leu Ala Met Phe Pro Met	245	250	

<210> 47

<211> 752

<212> DNA

<213> Homo sapiens

<400> 47

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<210> 48

<211> 210

<212> PRT

<213> Homo sapiens

<400> 48

Met Gly Asp Ile Pro Ala Val Gly Leu Ser Ser Trp Lys Gln Ala Ser
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Pro Gly Lys Val Thr Glu Ala Val Lys Glu Ala Ile Asp Ala Gly Tyr
 20 25 30

Arg His Phe Asp Cys Ala Tyr Phe Tyr His Asn Glu Arg Glu Val Gly
 35 40 45

Ala Gly Ile Arg Cys Lys Ile Lys Glu Gly Ala Val Arg Arg Glu Asp
 50 55 60

Leu Phe Ile Ala Thr Lys Leu Trp Cys Thr Cys His Lys Lys Ser Leu
 65 70 75 80

Val Glu Thr Ala Cys Arg Lys Ser Leu Lys Ala Leu Lys Leu Asn Tyr
 85 90 95

Leu Asp Leu Tyr Leu Ile His Trp Pro Met Gly Phe Lys Pro Pro His
 100 105 110

Pro Glu Trp Ile Met Ser Cys Ser Glu Leu Ser Phe Cys Leu Ser His
 115 120 125

Pro Arg Val Gln Asp Leu Pro Leu Asp Glu Ser Asn Met Val Ile Pro
 130 135 140

Ser Asp Thr Asp Phe Leu Asp Thr Trp Glu Ile Leu Ile Arg Phe Gln
 145 150 155 160

Ile Gln Arg Asn Val Ile Val Ile Pro Gly Ser Ile Thr Pro Ser His
 165 170 175

Ile Lys Glu Asn Ile Gln Val Phe Asp Phe Glu Leu Thr Gln His Asp
 180 185 190

Met Asp Asn Ile Leu Ser Leu Asn Lys Asn Leu Arg Leu Ala Met Phe
 195 200 205

Pro Met
210

<210> 49
<211> 785
<212> DNA
<213> Homo sapiens

<400> 49
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acacagcagc atatggataa catctcagc cttaacagga atctccgact ggccatgttc 720
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ttcct 785

<210> 50
<211> 245
<212> PRT
<213> Homo sapiens

<400> 50
Met Gly Asp Ile Pro Ala Val Gly Leu Ser Ser Trp Lys Gln Ala Ser
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Pro Gly Lys Val Thr Glu Ala Val Lys Glu Ala Ile Asp Ala Gly Tyr
20 25 30
Arg His Phe Asp Cys Ala Tyr Phe Tyr His Asn Glu Arg Glu Val Gly
35 40 45
Ala Gly Ile Arg Cys Lys Ile Lys Glu Gly Ala Val Arg Arg Glu Asp
50 55 60
Leu Phe Ile Ala Thr Lys Leu Trp Cys Thr Cys His Lys Lys Ser Leu
65 70 75 80
Val Glu Thr Ala Cys Arg Lys Ser Leu Lys Ala Leu Lys Leu Asn Tyr
85 90 95
Leu Asp Leu Tyr Leu Ile His Trp Pro Met Gly Phe Lys Pro Arg Val
100 105 110
Gln Asp Leu Pro Leu Asp Glu Ser Asn Met Val Ile Pro Ser Arg Thr
115 120 125
Asp Phe Leu Asp Thr Trp Glu Ala Met Glu Asp Leu Val Ile Thr Gly

130

135

140

Leu Val Lys Asn Ile Gly Val Ser Asn Phe Asn His Glu Gln Leu Glu
 145 150 155 160

Arg Leu Leu Asn Lys Pro Gly Leu Arg Phe Lys Pro Leu Thr Asn Gln
 165 170 175

Ile Leu Ile Arg Phe Gln Ile Gln Arg Asn Val Ile Val Ile Pro Gly
 180 185 190

Ser Ile Thr Pro Ser His Ile Lys Glu Asn Ile Gln Val Phe Asp Phe
 195 200 205

Glu Leu Thr Gln His Asp Met Asp Asn Ile Leu Ser Leu Asn Arg Asn
 210 215 220

Leu Arg Leu Ala Met Phe Pro Arg Thr Lys Asn His Lys Asp Tyr Pro
 225 230 235 240

Phe His Ile Glu Tyr
 245

<210> 51

<211> 937

<212> DNA

<213> Homo sapiens

<400> 51

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 aagccactaa ccaaccagat tgaatgccc ccatatctta ctccagaaga lctgatcagt 540
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<210> 52

<211> 269

<212> PRT

<213> Homo sapiens

<400> 52

Met Gly Asp Ile Pro Ala Val Gly Leu Ser Ser Trp Lys Gln Ala Ser
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Pro Gly Lys Val Thr Glu Ala Val Lys Glu Ala Ile Asp Ala Gly Tyr
 20 25 30
 Arg His Phe Asp Cys Ala Tyr Phe Tyr His Asn Glu Arg Glu Val Gly
 35 40 45
 Ala Gly Ile Arg Cys Lys Ile Lys Glu Gly Ala Val Arg Arg Glu Asp
 50 55 60
 Leu Phe Ile Ala Thr Lys Pro Pro His Pro Glu Trp Ile Met Ser Cys
 65 70 75 80
 Ser Glu Leu Ser Phe Cys Leu Ser His Pro Arg Val Gln Asp Leu Pro
 85 90 95
 Leu Asp Glu Ser Asn Met Val Ile Pro Ser Asp Thr Asp Phe Leu Asp
 100 105 110
 Thr Trp Glu Ala Met Glu Asp Leu Val Ile Thr Gly Leu Val Lys Asn
 115 120 125
 Ile Gly Val Ser Asn Phe Asn His Glu Gln Leu Glu Arg Leu Leu Asn
 130 135 140
 Lys Pro Gly Leu Arg Phe Lys Pro Leu Thr Asn Gln Ile Glu Cys His
 145 150 155 160
 Pro Tyr Leu Thr Gln Lys Asn Leu Ile Ser Phe Cys Gln Ser Arg Asp
 165 170 175
 Val Ser Val Thr Ala Tyr Arg Pro Leu Gly Gly Ser Cys Glu Gly Val
 180 185 190
 Asp Leu Ile Asp Asn Pro Val Ile Lys Arg Ile Ala Lys Glu His Gly
 195 200 205
 Lys Ser Pro Ala Gln Ile Leu Ile Arg Phe Gln Ile Gln Arg Asn Val
 210 215 220
 Ile Val Ile Pro Gly Ser Ile Thr Pro Ser His Ile Lys Glu Asn Ile
 225 230 235 240
 Gln Val Phe Asp Phe Glu Leu Thr Gln His Asp Met Asp Asn Ile Leu
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 Ser Leu Asn Arg Asn Leu Arg Leu Ala Met Phe Pro Met
 260 265

<210> 53

<211> 884

<212> DNA

<213> Homo sapiens

<400> 53

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<210> 54

<211> 240

<212> PRT

<213> Homo sapiens

.400> 54

Met Lys Ala Ala Val Leu Thr Leu Ala Val Leu Phe Leu Thr Gly Ser
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Gln Ala Arg His Phe Trp Gln Gln Asp Glu Pro Pro Gln Ser Pro Trp
20 25 30
Asp Arg Val Lys Asp Leu Ala Thr Val Tyr Val Asp Val Leu Lys Asp
35 40 45
Ser Val Thr Ser Thr Phe Ser Lys Leu Arg Glu Gln Leu Gly Pro Val
50 55 60
Thr Gln Glu Phe Trp Asp Asn Leu Glu Lys Glu Thr Glu Gly Leu Arg
65 70 75 80
Gln Glu Met Ser Lys Asp Leu Glu Glu Val Lys Ala Lys Val Gln Pro
85 90 95
Tyr Leu Asp Asp Phe Gln Lys Lys Trp Gln Glu Glu Met Glu Leu Tyr
100 105 110
Arg Gln Lys Val Glu Pro Leu Arg Ala Glu Leu Gln Glu Gly Ala Arg
115 120 125
Gln Lys Leu His Glu Leu Gln Glu Lys Leu Ser Pro Leu Gly Glu Glu
130 135 140
Met Arg Asp Arg Ala Arg Ala His Val Asp Ala Leu Arg Thr His Leu
145 150 155 160
Ala Pro Tyr Ser Asp Glu Leu Arg Gln Arg Leu Ala Ala Arg Leu Glu
165 170 175
Ala Leu Lys Glu Asn Gly Gly Ala Arg Leu Ala Glu Tyr His Ala Lys
180 185 190

Ala Thr Glu His Leu Ser Thr Leu Ser Glu Lys Ala Lys Pro Ala Leu
 195 200 205

Glu Asp Leu Arg Gln Gly Leu Leu Pro Val Leu Glu Ser Phe Lys Val
 210 215 220

Ser Phe Leu Ser Ala Leu Glu Glu Tyr Thr Lys Lys Leu Asn Thr Gln
 225 230 235 240

<210> 55

<211> 751

<212> DNA

<213> Homo sapiens

<400> 55

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<210> 56

<211> 207

<212> PRT

<213> Homo sapiens

<400> 56

Met Lys Ala Ala Val Leu Thr Leu Ala Val Leu Phe Leu Thr Gly Ser
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 Gln Ala Arg His Phe Trp Gln Gln Asp Glu Pro Pro Gln Ser Pro Trp
 20 25 30
 Asp Arg Val Lys Asp Leu Ala Thr Val Tyr Val Asp Val Leu Lys Asp
 35 40 45
 Ser Val Thr Ser Thr Phe Ser Lys Leu Arg Glu Gln Leu Gly Pro Val
 50 55 60
 Thr Gln Glu Phe Trp Asp Asn Leu Glu Lys Glu Thr Glu Gly Leu Arg
 65 70 75 80
 Gln Glu Met Ser Lys Asp Leu Glu Glu Val Lys Ala Lys Val Gln Pro
 85 90 95

Tyr Leu Asp Asp Phe Gln Lys Lys Trp Gln Glu Glu Met Glu Leu Tyr
100 105 110

Arg Gln Lys Val Glu Pro Leu Arg Ala Glu Leu Gln Glu Gly Ala Arg
115 120 125

Gln Lys Leu His Glu Leu Arg Gln Arg Leu Ala Glu Arg Leu Glu Ala
130 135 140

Leu Lys Glu Asn Gly Gly Ala Arg Leu Ala Glu Tyr His Ala Lys Ala
145 150 155 160

Thr Glu His Leu Ser Thr Leu Ser Glu Lys Ala Lys Pro Ala Leu Glu
165 170 175

Asp Leu Arg Gln Gly Leu Leu Pro Val Leu Glu Ser Phe Lys Val Ser
180 185 190

Phe Leu Ser Ala Leu Glu Glu Tyr Thr Lys Lys Leu Asn Thr Gln
195 200 205

<210> 57

<211> 3839

<212> DNA

<213> Homo sapiens

<400> 57

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caccaccaag	acagtgtctg	ccggaaacca	agacgcagtg	tccgtggggc	tcactgggtc	3120
agggaaacgtg	gcgacagggg	ccacccacac	tggcctcagc	acctccaga	actgggtacc	3180
tagtaccccc	gccacctcct	gggggtggact	caccagttcc	aggaccacag	ctcagctggc	3240
tgcctccca	cctgggccaa	aggtgctgtc	ggcggaacag	gggagctact	tcgttcgttt	3300
aggtgacctg	gggtccagct	tccgccagcg	ggcatttgaa	cacgcgggtg	gccacctgca	3360
gcacggccag	ttccaaagca	gggacactct	ggcccagctc	caggactgct	tcagggtgat	3420
tgaaaaggcc	cagcaggctc	cagaagggca	gccacgtctg	gaccagggct	caggtgccag	3480
tgcggaggac	gctgctgtcc	aggagagggg	ctggggcctt	ctccggcagc	tgacacgggc	3540
ctacagtggc	ctgtgtctca	gctccagggg	cctgcccggc	gagctccagc	agccagtggg	3600
gcggggcgcg	cacagcctct	gtgagctcta	tggcatcggt	gcctcagctg	gctctgtaga	3660
ggagctgccc	qcaqagcggc	tgtgtcagag	ccgcgaaggt	gtgcaccagg	cttggcaggg	3720
gttagagcag	ctgctggagg	gctacagcca	caatcccccg	ctcagctggc	tgttagggcc	3780
cttcgccttg	cccgtgtggc	ggcagtagct	gtaggagcct	gcaggcccgg	cgcgggggtc	3839

<210> 58

<211> 1225

<212> PRT

<213> Homo sapiens

<400> 58

Met	Ser	Ala	Pro	Asp	Glu	Gly	Arg	Arg	Asp	Pro	Pro	Lys	Pro	Lys	Gly
1					5					10					15

Lys	Pro	Pro	Ala	Pro	Met	Gln	Thr	Leu	Gly	Ser	Phe	Phe	Gly	Ser	Leu
			20					25						30	

Pro	Gly	Phe	Ser	Ser	Ala	Arg	Asn	Leu	Val	Ala	Asn	Ala	His	Ser	Ser
		35					40					45			

Val	Gly	Ala	Lys	Asp	Leu	Val	Cys	Ser	Lys	Met	Ser	Arg	Ala	Lys	Asp
	50					55					60				

Ala	Val	Ser	Ser	Gly	Val	Ala	Ser	Val	Val	Asp	Val	Ala	Lys	Gly	Val
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

65	70	75	80
Val Gln Gly Gly Leu Asp Thr Thr Arg Ser Ala Leu Thr Gly Thr Lys	85	90	95
Glu Val Val Ser Ser Gly Val Thr Gly Ala Met Asp Met Ala Lys Gly	100	105	110
Ala Val Gln Gly Gly Leu Asp Thr Ser Lys Ala Val Leu Thr Gly Thr	115	120	125
Lys Asp Thr Val Ser Thr Gly Leu Thr Gly Ala Val Asn Val Ala Lys	130	135	140
Gly Thr Val Gln Ala Gly Val Asp Thr Thr Lys Thr Val Leu Thr Gly	145	150	155
Thr Lys Asp Thr Val Thr Thr Gly Val Met Gly Ala Val Asn Leu Ala	165	170	175
Lys Gly Thr Val Gln Thr Gly Val Glu Thr Ser Lys Ala Val Leu Thr	180	185	190
Gly Thr Lys Asp Ala Val Ser Thr Gly Leu Thr Gly Ala Val Asn Val	195	200	205
Ala Arg Gly Ser Ile Gln Thr Gly Val Asp Thr Ser Lys Thr Val Leu	210	215	220
Thr Gly Thr Lys Asp Thr Val Cys Ser Gly Val Thr Gly Ala Met Asn	225	230	235
Val Ala Lys Gly Thr Ile Gln Thr Gly Val Asp Thr Ser Lys Thr Val	245	250	255
Leu Thr Gly Thr Lys Asp Thr Val Cys Ser Gly Val Thr Gly Ala Met	260	265	270
Asn Val Ala Lys Gly Thr Ile Gln Thr Gly Val Asp Thr Ser Lys Thr	275	280	285
Val Leu Thr Gly Thr Lys Asp Thr Val Cys Ser Gly Val Thr Gly Ala	290	295	300
Met Asn Val Ala Lys Gly Thr Ile Gln Thr Gly Val Asp Thr Thr Lys	305	310	315
Thr Val Leu Thr Gly Thr Lys Asn Thr Val Cys Ser Gly Val Thr Gly	325	330	335
Ala Val Asn Leu Ala Lys Glu Ala Ile Gln Gly Gly Leu Asp Thr Thr	340	345	350
Lys Ser Met Val Met Gly Thr Lys Asp Thr Met Ser Thr Gly Leu Thr	355	360	365
Gly Ala Ala Asn Val Ala Lys Gly Ala Met Gln Thr Gly Leu Asn Thr			

370

375

380

Thr Gln Asn Ile Ala Thr Gly Thr Lys Asp Thr Val Cys Ser Gly Val
 385 390 395 400

Thr Gly Ala Met Asn Leu Ala Arg Gly Thr Ile Gln Thr Gly Val Asp
 405 410 415

Thr Thr Lys Ile Val Leu Thr Gly Thr Lys Asp Thr Val Cys Ser Gly
 420 425 430

Val Thr Gly Ala Ala Asn Val Ala Lys Gly Ala Val Gln Gly Gly Leu
 435 440 445

Asp Thr Thr Lys Ser Val Leu Thr Gly Thr Lys Asp Ala Val Ser Thr
 450 455 460

Gly Leu Thr Gly Ala Val Asn Val Ala Lys Gly Thr Val Gln Thr Gly
 465 470 475 480

Val Asp Thr Thr Lys Thr Val Leu Thr Gly Thr Lys Asp Thr Val Cys
 485 490 495

Ser Gly Val Thr Ser Ala Val Asn Val Ala Lys Gly Ala Val Gln Gly
 500 505 510

Gly Leu Asp Thr Thr Lys Ser Val Val Ile Gly Thr Lys Asp Thr Met
 515 520 525

Ser Thr Gly Leu Thr Gly Ala Ala Asn Val Ala Lys Gly Ala Val Gln
 530 535 540

Thr Gly Val Asp Thr Ala Lys Thr Val Leu Thr Gly Thr Lys Asp Thr
 545 550 555 560

Val Thr Thr Gly Leu Val Gly Ala Val Asn Val Ala Lys Gly Thr Val
 565 570 575

Gln Thr Gly Met Asp Thr Thr Lys Thr Val Leu Thr Gly Thr Lys Asp
 580 585 590

Thr Ile Tyr Ser Gly Val Thr Ser Ala Val Asn Val Ala Lys Gly Ala
 595 600 605

Val Gln Thr Gly Leu Lys Thr Thr Gln Asn Ile Ala Thr Gly Thr Lys
 610 615 620

Asn Thr Phe Gly Ser Gly Val Thr Ser Ala Val Asn Val Ala Lys Gly
 625 630 635 640

Ala Ala Gln Thr Gly Val Asp Thr Ala Lys Thr Val Leu Thr Gly Thr
 645 650 655

Lys Asp Thr Val Thr Thr Gly Leu Met Gly Ala Val Asn Val Ala Lys
 660 665 670

Gly Thr Val Gln Thr Ser Val Asp Thr Thr Lys Thr Val Leu Thr Gly

675

680

685

Thr Lys Asp Thr Val Cys Ser Gly Val Thr Gly Ala Ala Asn Val Ala		
690	695	700
Lys Gly Ala Ile Gln Gly Gly Leu Asp Thr Thr Lys Ser Val Leu Thr		
705	710	715 720
Gly Thr Lys Asp Ala Val Ser Thr Gly Leu Thr Gly Ala Val Lys Leu		
	725	730 735
Ala Lys Gly Thr Val Gln Thr Gly Met Asp Thr Thr Lys Thr Val Leu		
	740	745 750
Thr Gly Thr Lys Asp Ala Val Cys Ser Gly Val Thr Gly Ala Ala Asn		
	755	760 765
Val Ala Lys Gly Ala Val Gln Met Gly Val Asp Thr Ala Lys Thr Val		
	770	775 780
Leu Thr Gly Thr Lys Asp Thr Val Cys Ser Gly Val Thr Gly Ala Ala		
	785	790 795 800
Asn Val Ala Lys Gly Ala Val Gln Thr Gly Leu Lys Thr Thr Gln Asn		
	805	810 815
Ile Ala Thr Gly Thr Lys Asn Thr Leu Gly Ser Gly Val Thr Gly Ala		
	820	825 830
Ala Lys Val Ala Lys Gly Ala Val Gln Gly Gly Leu Asp Thr Thr Lys		
	835	840 845
Ser Val Leu Thr Gly Thr Lys Asp Ala Val Ser Thr Gly Leu Thr Gly		
	850	855 860
Ala Val Asn Leu Ala Lys Gly Thr Val Gln Thr Gly Val Asp Thr Ser		
	865	870 875 880
Lys Thr Val Leu Thr Gly Thr Lys Asp Thr Val Cys Ser Gly Val Thr		
	885	890 895
Gly Ala Val Asn Val Ala Lys Gly Thr Val Gln Thr Gly Val Asp Thr		
	900	905 910
Ala Lys Thr Val Leu Ser Gly Ala Lys Asp Ala Val Thr Thr Gly Val		
	915	920 925
Thr Gly Ala Val Asn Val Ala Lys Gly Thr Val Gln Thr Gly Val Asp		
	930	935 940
Ala Ser Lys Ala Val Leu Met Gly Thr Lys Asp Thr Val Phe Ser Gly		
	945	950 955 960
Val Thr Gly Ala Met Ser Met Ala Lys Gly Ala Val Gln Gly Gly Leu		
	965	970 975
Asp Thr Thr Lys Thr Val Leu Thr Gly Thr Lys Asp Ala Val Ser Ala		

980

985

990

Gly Leu Met Gly Ser Gly Asn Val Ala Thr Gly Ala Thr His Thr Gly
 995 1000 1005

Leu Ser Thr Phe Gln Asn Trp Leu Pro Ser Thr Pro Ala Thr Ser Trp
 1010 1015 1020

Gly Gly Leu Thr Ser Ser Arg Thr Thr Ala Gln Leu Ala Ala Ser Gln
 1025 1030 1035 1040

Pro Gly Pro Lys Val Leu Ser Ala Glu Gln Gly Ser Tyr Phe Val Arg
 1045 1050 1055

Leu Gly Asp Leu Gly Pro Ser Phe Arg Gln Arg Ala Phe Glu His Ala
 1060 1065 1070

Val Ser His Leu Gln His Gly Gln Phe Gln Ala Arg Asp Thr Leu Ala
 1075 1080 1085

Gln Leu Gln Asp Cys Phe Arg Leu Ile Glu Lys Ala Gln Gln Ala Pro
 1090 1095 1100

Glu Gly Gln Pro Arg Leu Asp Gln Gly Ser Gly Ala Ser Ala Glu Asp
 1105 1110 1115 1120

Ala Ala Val Gln Glu Arg Val Cys Gly Leu Leu Arg Gln Leu His Thr
 1125 1130 1135

Ala Tyr Ser Gly Leu Val Ser Ser Leu Gln Gly Leu Pro Ala Glu Leu
 1140 1145 1150

Gln Gln Pro Val Gly Arg Ala Arg His Ser Leu Cys Glu Leu Tyr Gly
 1155 1160 1165

Ile Val Ala Ser Ala Gly Ser Val Glu Glu Leu Pro Ala Glu Arg Leu
 1170 1175 1180

Val Gln Ser Arg Glu Gly Val His Gln Ala Trp Gln Gly Leu Glu Gln
 1185 1190 1195 1200

Leu Leu Glu Gly Leu Gln His Asn Pro Pro Leu Ser Trp Leu Val Gly
 1205 1210 1215

Pro Phe Ala Leu Pro Ala Gly Gly Gln
 1220 1225

<210> 59

<211> 810

<212> DNA

<213> Homo sapiens

<400> 59

aggcctgcag gtgagtgctg ggtgctcag gcttcaatg aggaatgagt gtaggatggg 60
 aggetagggg aacacattc acgacattc tctacccct tctagttct cactttctca 120
 ctatgtctgc tctacacgaa gggagacggg atctctccaa aacgagggg agaacctgg 180

gcagcttctt tgggtccctg cctggttcca actctgcccg gaacctgggtg gccaacgcac 240
 atagctcggc gagagcccg cggcccgctg accccacagg agcgcctgct gccgaggctg 300
 cccaaccaca ggctcaggtg gctgcccacc cagagcagac ggccccatgg acggagaagg 360
 agctgcaacc ttcggaagaag attgaaaagg cccagcaggc tccagaaggg cagccacgtc 420
 tggaccaggg ctacaggtgcc agtgccggagg acgctgctgt ccaggaggag cgggatgccc 480
 qggttctctc caqggtctac qgccttctcc qgcagctqca cacqgcctac agtggccttq 540
 tctccagcct cgggggctg cccgcgcgagc tccagcagcc agtggggcgg gcgcgggcaca 600
 qccctcttqa qctctatgcc atcqtgcct caqctqctc tqtatagaaq ctqccctcaq 660
 agcggctggt gcagagcgc gaggggtgtgc accaggttgg gcagggggta gacgagctgc 720
 tqagagcct acacacaaat cccccctca qctaacctaat aqgccttcc ccttaccac 780
 ctggcgggca gtagctgtag gagcctgcag 810

<210> 60

<211> 223

<212> PRF

<213> Homo sapiens

<400> 60

Met Ser Ala Pro Asp Glu Gly Arg Arg Asp Pro Pro Lys Pro Lys Gly
 1 5 10 15

Lys Thr Leu Gly Ser Phe Phe Gly Ser Leu Pro Gly Phe Asn Ser Ala
 20 25 30

Arg Asn Leu Val Ala Asn Ala His Ser Ser Ala Arg Ala Arg Pro Ala
 35 40 45

Ala Asp Pro Thr Gly Ala Pro Ala Ala Glu Ala Ala Gln Pro Gln Ala
 50 55 60

Gln Val Ala Ala His Pro Glu Gln Thr Ala Pro Trp Thr Glu Lys Glu
 65 70 75 80

Leu Gln Pro Ser Glu Lys Ile Glu Lys Ala Gln Gln Ala Pro Glu Gly
 85 90 95

Gln Pro Arg Leu Asp Gln Gly Ser Gly Ala Ser Ala Glu Asp Ala Ala
 100 105 110

Val Gln Glu Glu Arg Asp Ala Gly Val Leu Ser Arg Val Cys Gly Leu
 115 120 125

Leu Arg Gln Leu His Thr Ala Tyr Ser Gly Leu Val Ser Ser Leu Arg
 130 135 140

Gly Leu Pro Ala Glu Leu Gln Gln Pro Val Gly Arg Ala Arg His Ser
 145 150 155 160

Leu Cys Glu Leu Tyr Gly Ile Val Ala Ser Ala Gly Ser Val Glu Glu
 165 170 175

Leu Pro Ala Glu Arg Leu Val Gln Ser Arg Glu Gly Val His Gln Ala
 180 185 190

Tyr Gln Gly Leu Glu Gln Leu Leu Glu Gly Leu Gln His Asn Pro Pro
 195 200 205

Leu Ser Trp Leu Val Gly Pro Phe Ala Leu Pro Ala Gly Gly Gln
 210 215 220

<210> 61

<211> 399

<212> PRT

<213> Homo sapiens

<400> 61

Met Lys Met Arg Phe Leu Gly Leu Val Val Cys Leu Val Leu Trp Pro
 1 5 10 15

Leu His Ser Glu Gly Ser Gly Gly Lys Leu Thr Ala Val Asp Pro Glu
 20 25 30

Thr Asn Met Asn Val Ser Glu Ile Ile Ser Tyr Trp Gly Phe Pro Ser
 35 40 45

Glu Glu Tyr Leu Val Glu Thr Glu Asp Gly Tyr Ile Leu Cys Leu Asn
 50 55 60

Arg Ile Pro His Gly Arg Lys Asn His Ser Asp Lys Gly Pro Lys Pro
 65 70 75 80

Val Val Phe Leu Gln His Gly Leu Leu Ala Asp Ser Ser Asn Trp Val
 85 90 95

Thr Asn Leu Ala Asn Ser Ser Leu Gly Phe Ile Leu Ala Asp Ala Gly
 100 105 110

Phe Asp Val Trp Met Gly Asn Ser Arg Gly Asn Thr Trp Ser Arg Lys
 115 120 125

His Lys Thr Leu Ser Val Ser Gln Asp Glu Phe Trp Ala Phe Ser Tyr
 130 135 140

Asp Glu Met Ala Lys Tyr Asp Leu Pro Ala Ser Ile Asn Phe Ile Leu
 145 150 155 160

Asn Lys Thr Gly Gln Glu Gln Val Tyr Tyr Val Gly His Ser Gln Gly
 165 170 175

Thr Thr Ile Gly Phe Ile Ala Phe Ser Gln Ile Pro Glu Leu Ala Lys
 180 185 190

Arg Ile Lys Met Phe Phe Ala Leu Gly Pro Val Ala Ser Val Ala Phe
 195 200 205

Cys Thr Ser Pro Met Ala Lys Leu Gly Arg Leu Pro Asp His Leu Ile
 210 215 220

Lys Asp Leu Phe Gly Asp Lys Glu Phe Leu Pro Gln Ser Ala Phe Leu
 225 230 235 240

Lys Phe Leu Gly Thr His Val Cys Thr His Val Ile Leu Lys Glu Leu

Phe Asp Val Trp Met Gly Asn Ser Arg Gly Asn Thr Trp Ser Arg Lys
 115 120 125
 His Lys Thr Leu Ser Val Ser Gln Asp Glu Phe Trp Ala Phe Ser Tyr
 130 135 140
 Asp Glu Met Ala Lys Tyr Asp Leu Pro Ala Ser Ile Asn Phe Ile Leu
 145 150 155 160
 Asn Lys Thr Glv Gln Glu Gln Val Tyr Tyr Val Glv His Ser Gln Glv
 165 170 175
 Thr Thr Ile Gly Phe Ile Ala Phe Ser Gln Ile Pro Glu Leu Ala Lys
 180 185 190
 Arg Ile Lys Met Phe Phe Ala Leu Gly Pro Val Ala Ser Val Ala Phe
 195 200 205
 Cys Thr Ser Pro Met Ala Lys Leu Gly Arg Leu Pro Asp His Leu Ile
 210 215 220
 Lys Asp Leu Phe Gly Asp Lys Glu Phe Leu Pro Gln Ser Ala Phe Leu
 225 230 235 240
 Lys Trp Leu Gly Thr His Val Cys Thr His Val Ile Leu Lys Glu Leu
 245 250 255
 Cys Gly Asn Leu Cys Phe Leu Leu Cys Gly Phe Asn Glu Arg Asn Leu
 260 265 270
 Asn Met Ser Arg Val Asp Val Tyr Thr Thr His Ser Pro Ala Gly Thr
 275 280 285
 Ser Val Gln Asn Met Leu His Trp Ser Gln Ala Val Lys Phe Gln Lys
 290 295 300
 Phe Gln Ala Phe Asp Trp Gly Ser Ser Ala Lys Asn Tyr Phe His Tyr
 305 310 315 320
 Asn Gln Ser Tyr Pro Pro Thr Tyr Asn Val Lys Asp Met Leu Val Pro
 325 330 335
 Thr Ala Val Trp Ser Gly Gly His Asp Trp Leu Ala Asp Val Tyr Asp
 340 345 350
 Val Asn Ile Leu Leu Thr Gln Ile Thr Asn Leu Val Phe His Glu Ser
 355 360 365
 Ile Pro Glu Trp Glu His Leu Asp Phe Ile Trp Gly Leu Asp Ala Pro
 370 375 380
 Trp Arg Leu Tyr Asn Lys Ile Ile Asn Leu Met Arg Lys Tyr Gln
 385 390 395

210-63
 211-18

<212> PRT

<213> Homo sapiens

<400> 63

Met Lys Met Arg Phe Leu Gly Leu Val Val Cys Leu Val Leu Trp Pro
1 5 10 15
Leu His Ser Glu Gly Ser Gly Glv Lys Leu Thr Ala Val Asp Pro Glu
20 25 30
Thr Asn Met Asn Val Ser Glu Ile Ile Ser Tyr Trp Gly Phe Pro Ser
35 40 45
Glu Glu Tyr Leu Val Glu Thr Glu Asp Gly Tyr Ile Leu Cys Leu Asn
50 55 60
Arg Ile Pro His Gly Arg Lys Asn His Ser Asp Lys Gly Pro Lys Pro
65 70 75 80
Val Val Phe Leu Gln His Gly Leu Leu Ala Asp Ser Ser Asn Trp Val
85 90 95
Thr Asn Leu Ala Asn Ser Ser Leu Gly Phe Ile Leu Ala Asp Ala Gly
100 105 110
Phe Asp Val Trp Met Gly Asn Ser Arg Gly Asn Thr Trp Ser Arg Lys
115 120 125
His Lys Thr Leu Ser Val Ser Gln Asp Glu Phe Trp Ala Phe Ser Tyr
130 135 140
Asp Glu Met Ala Lys Tyr Asp Leu Pro Ala Ser Ile Asn Phe Ile Leu
145 150 155 160
Asn Lys Thr Gly Gln Glu Gln Val Tyr Tyr Val Gly His Ser Gln Gly
165 170 175
Thr Thr Ile Gly Phe Ile Ala Phe Ser Gln Ile Pro Glu Leu Ala Lys
180 185 190
Arg Ile Lys Met Phe Phe Ala Leu Gly Pro Val Ala Ser Val Ala Phe
195 200 205
Cys Thr Ser Pro Met Ala Lys Leu Gly Arg Leu Pro Asp His Leu Ile
210 215 220
Lys Asp Leu Phe Gly Asp Lys Glu Phe Leu Pro Gln Ser Ala Phe Leu
225 230 235 240
Lys Trp Leu Gly Thr His Val Cys Thr His Val Ile Leu Lys Glu Leu
245 250 255
Cys Gly Asn Leu Cys Phe Leu Leu Cys Gly Phe Asn Glu Arg Asn Leu
260 265 270
Asn Met Ser Arg Val Asp Val Tyr Thr Thr His Ser Pro Ala Gly Thr
275 280 285

Ser Val Gln Asn Met Leu His Trp Ser Gln Ala Val Lys Phe Gln Lys
290 295 300

Phe Gln Ala Phe Asp Trp Gly Ser Ser Ala Lys Asn Tyr Phe His Tyr
305 310 315 320

Asn Gln Ser Tyr Pro Pro Thr Tyr Asn Val Lys Asp Met Leu Val Pro
325 330 335

Thr Ala Val Trp Ser Gly Gly His Asp Trp Leu Ala Asp Val Tyr Asp
340 345 350

Val Asn Ile Leu Leu Thr Gln Ile Thr Asn Leu Val Phe His Glu Ser
355 360 365

Ile Pro Glu Trp Glu His Leu Asp Phe Ile Trp Gly Leu Asp Ala Pro
370 375 380

Trp Arg Leu Tyr Asn Lys Ile Ile Asn Leu Met Arg Lys Tyr Gln
385 390 395

<210> 64

<211> 399

<212> PRT

<213> Homo sapiens

<400> 64

Met Lys Met Arg Phe Leu Gly Leu Val Val Cys Leu Val Leu Trp Pro
1 5 10 15

Leu His Ser Glu Gly Ser Gly Gly Lys Leu Thr Ala Val Asp Pro Glu
20 25 30

Thr Asn Met Asn Val Ser Glu Ile Ile Ser Tyr Trp Gly Phe Pro Ser
35 40 45

Glu Glu Tyr Leu Val Glu Thr Glu Asp Gly Tyr Ile Leu Cys Leu Asn
50 55 60

Arg Ile Pro His Gly Arg Lys Asn His Ser Asp Lys Gly Pro Lys Pro
65 70 75 80

Val Val Phe Leu Gln His Gly Leu Leu Ala Asp Ser Ser Asn Trp Val
85 90 95

Thr Asn Leu Ala Asn Ser Ser Leu Gly Phe Ile Leu Ala Asp Ala Gly
100 105 110

Phe Asp Val Trp Met Gly Asn Ser Arg Gly Asn Thr Trp Ser Arg Lys
115 120 125

His Lys Thr Leu Ser Val Ser Gln Asp Glu Phe Trp Ala Phe Ser Tyr
130 135 140

Asp Glu Met Ala Ile Tyr Asp Leu Pro Ala Ser Ile Asn Phe Ile Leu

145	150	155	160
Asn Lys Thr Gly Gln Glu Gln Val Tyr Tyr Val Gly His Ser Gln Gly			
	165	170	175
Thr Thr Ile Gly Phe Ile Ala Phe Ser Gln Ile Pro Glu Leu Ala Lys			
	180	185	190
Arg Ile Lys Met Phe Phe Ala Leu Gly Pro Val Ala Ser Val Ala Phe			
	195	200	205
Cys Thr Ser Pro Met Ala Lys Leu Gly Arg Leu Pro Asp His Leu Ile			
	210	215	220
Lys Asp Leu Phe Gly Asp Lys Glu Phe Leu Pro Gln Ser Ala Phe Leu			
	225	230	240
Lys Trp Leu Gly Thr His Val Cys Thr His Val Ile Leu Lys Glu Leu			
	245	250	255
Cys Gly Asn Leu Cys Phe Leu Leu Cys Gly Phe Asn Glu Arg Asn Leu			
	260	265	270
Asn Met Ser Arg Val Asp Val Tyr Thr Thr His Ser Pro Ala Gly Thr			
	275	280	285
Ser Val Gln Asn Met Leu His Trp Ser Gln Ala Val Lys Phe Gln Lys			
	290	295	300
Phe Gln Ala Phe Asp Trp Gly Ser Ser Ala Lys Asn Tyr Phe His Tyr			
	305	310	320
Asn Gln Ser Tyr Pro Pro Thr Tyr Asn Val Lys Asp Met Leu Val Pro			
	325	330	335
Thr Ala Val Trp Ser Gly Gly His Asp Trp Leu Ala Asp Val Tyr Asp			
	340	345	350
Val Asn Ile Leu Leu Thr Gln Ile Thr Asn Leu Val Phe His Glu Ser			
	355	360	365
Ile Pro Glu Trp Glu His Leu Asp Phe Ile Trp Gly Leu Asp Ala Pro			
	370	375	380
Trp Arg Leu Tyr Asn Lys Ile Ile Asn Leu Met Arg Lys Tyr Gln			
	385	390	395

<210> 65

<211> 398

<212> PRT

<213> Homo sapiens

<400> 65

Met Trp Leu Leu Leu Thr Met Ala Ser Leu Ile Ser Val Leu Gly Thr
1 5 10 15

Thr His Gly Leu Phe Gly Lys Leu His Pro Gly Ser Pro Glu Val Thr
 20 25 30
 Met Asn Ile Ser Gln Met Ile Thr Tyr Trp Gly Tyr Pro Asn Glu Glu
 35 40 45
 Tyr Glu Val Val Thr Glu Asp Gly Tyr Ile Leu Glu Val Asn Arg Ile
 50 55 60
 Pro Tyr Gly Lys Lys Asn Ser Gly Asn Thr Gly Gln Arg Pro Val Val
 65 70 75 80
 Phe Leu Gln His Gly Leu Leu Ala Ser Ala Thr Asn Trp Ile Ser Asn
 85 90 95
 Leu Pro Asn Asn Ser Leu Ala Phe Ile Leu Ala Asp Ala Gly Tyr Asp
 100 105 110
 Val Trp Leu Gly Asn Ser Arg Gly Asn Thr Trp Ala Arg Arg Asn Leu
 115 120 125
 Tyr Tyr Ser Pro Asp Ser Val Glu Phe Trp Ala Phe Ser Phe Asp Glu
 130 135 140
 Met Ala Lys Tyr Asp Leu Pro Ala Thr Ile Asp Phe Ile Val Lys Lys
 145 150 155 160
 Thr Gly Gln Lys Gln Leu His Tyr Val Gly His Ser Gln Gly Thr Thr
 165 170 175
 Ile Gly Phe Ile Ala Phe Ser Thr Asn Pro Ser Leu Ala Lys Arg Ile
 180 185 190
 Lys Thr Phe Tyr Ala Leu Ala Pro Val Ala Thr Val Lys Tyr Thr Lys
 195 200 205
 Ser Leu Ile Asn Lys Leu Arg Phe Val Pro Gln Ser Leu Phe Lys Phe
 210 215 220
 Ile Phe Gly Asp Lys Ile Phe Tyr Pro His Asn Phe Phe Asp Gln Phe
 225 230 235 240
 Leu Ala Thr Glu Val Cys Ser Arg Glu Met Leu Asn Leu Leu Cys Ser
 245 250 255
 Asn Ala Leu Phe Ile Ile Cys Gly Phe Asp Ser Lys Asn Phe Asn Thr
 260 265 270
 Ser Arg Leu Asp Val Tyr Leu Ser His Asn Pro Ala Gly Thr Ser Val
 275 280 285
 Gln Asn Met Phe His Trp Thr Gln Ala Val Lys Ser Gly Lys Phe Gln
 290 295 300
 Ala Tyr Asp Trp Gly Ser Pro Val Gln Asn Arg Met His Tyr Asp Gln
 305 310 315 320

Ser Gln Pro Pro Tyr Tyr Asn Val Thr Ala Met Asn Val Pro Ile Ala
325 330 335

Val Trp Asn Gly Gly Lys Asp Leu Leu Ala Asp Pro Gln Asp Val Gly
340 345 350

Leu Leu Leu Pro Lys Leu Pro Asn Leu Ile Tyr His Lys Glu Ile Pro
355 360 365

Phe Tyr Asn His Leu Asp Phe Ile Trp Ala Met Asp Ala Pro Gln Glu
370 375 380

Val Tyr Asn Asp Ile Val Ser Met Ile Ser Glu Asp Lys Lys
385 390 395

<210> 66

<211> 232

<212> PRT

<213> Homo sapiens

<400> 66

Phe Arg Val Ile Leu Leu Asp Leu Arg Gly Phe Gly Glu Ser Ser Pro
1 5 10 15

Ser Asp Leu Ala Glu Tyr Arg Phe Asp Asp Leu Ala Glu Asp Leu Glu
20 25 30

Ala Leu Leu Asp Ala Leu Gly Leu Glu Lys Pro Val Ile Leu Val Gly
35 40 45

His Ser Met Gly Gly Ala Ile Ala Leu Ala Tyr Ala Ala Lys Tyr Pro
50 55 60

Glu Leu Arg Val Lys Ala Leu Val Leu Val Ser Pro Pro Leu Pro Ala
65 70 75 80

Gly Leu Ser Ser Asp Leu Phe Pro Arg Gln Gly Asn Leu Glu Gly Leu
85 90 95

Leu Leu Ala Asn Phe Arg Asn Arg Leu Ser Arg Ser Val Glu Ala Leu
100 105 110

Leu Gly Arg Ala Leu Lys Gln Phe Phe Leu Leu Gly Arg Pro Leu Val
115 120 125

Ser Asp Phe Leu Lys Gln Ala Glu Asp Trp Leu Ser Ser Leu Ile Arg
130 135 140

Gln Gly Glu Asp Asp Gly Gly Asp Gly Leu Leu Gly Ala Ala Val Ala
145 150 155 160

Leu Gly Lys Leu Leu Gln Trp Asp Leu Ser Ala Leu Lys Asp Ile Lys
165 170 175

Val Phe Thr Leu Val Ile Trp Gly Thr Asp Asp Pro Leu Val Pro Leu
180 185 190

Asp Ala Ser Glu Lys Leu Ser Ala Leu Ile Pro Asn Ala Glu Val Val
 195 200 205

Val Ile Asp Asp Ala Gly His Leu Ala Leu Leu Glu Lys Pro Glu Glu
 210 215 220

Val Ala Glu Leu Ile Lys Phe Leu
 225 230

<210> 67

<211> 3312

<212> PRT

<213> Homo sapiens

<400> 67

Met Met Ala Arg Arg Pro Pro Trp Arg Gly Leu Gly Glu Arg Ser Thr
 1 5 10 15

Pro Ile Leu Leu Leu Leu Leu Ser Leu Phe Pro Leu Ser Gln Glu
 20 25 30

Glu Leu Gly Gly Gly Gly His Gln Gly Trp Asp Pro Gly Leu Ala Ala
 35 40 45

Thr Thr Gly Pro Arg Ala His Ile Gly Gly Gly Ala Leu Ala Leu Cys
 50 55 60

Pro Glu Ser Ser Gly Val Arg Glu Asp Gly Gly Pro Gly Leu Gly Val
 65 70 75 80

Arg Glu Pro Ile Phe Val Gly Leu Arg Gly Arg Arg Gln Ser Ala Arg
 85 90 95

Asn Ser Arg Gly Pro Pro Glu Gln Pro Asn Glu Glu Leu Gly Ile Glu
 100 105 110

His Gly Val Gln Pro Leu Gly Ser Arg Glu Arg Glu Thr Gly Gln Gly
 115 120 125

Pro Gly Ser Val Leu Tyr Trp Arg Pro Glu Val Ser Ser Cys Gly Arg
 130 135 140

Thr Gly Pro Leu Gln Arg Gly Ser Leu Ser Pro Gly Ala Leu Ser Ser
 145 150 155 160

Gly Val Pro Gly Ser Gly Asn Ser Ser Pro Leu Pro Ser Asp Phe Leu
 165 170 175

Ile Arg His His Gly Pro Lys Pro Val Ser Ser Gln Arg Asn Ala Gly
 180 185 190

Thr Gly Ser Arg Lys Arg Val Gly Thr Ala Arg Cys Cys Gly Glu Leu
 195 200 205

Trp Ala Thr Gly Ser Lys Gly Gln Gly Glu Arg Ala Thr Thr Ser Gly

210

215

220

Ala Glu Arg Thr Ala Pro Arg Arg Asn Cys Leu Pro Gly Ala Ser Gly
 225 230 235 240
 Ser Gly Pro Glu Leu Asp Ser Ala Pro Arg Thr Ala Arg Thr Ala Pro
 245 250 255
 Ala Ser Gly Ser Ala Pro Arg Glu Ser Arg Thr Ala Pro Glu Pro Ala
 260 265 270
 Pro Lys Arg Met Arg Ser Arg Gly Leu Phe Arg Cys Arg Phe Leu Pro
 275 280 285
 Gln Arg Pro Gly Pro Arg Pro Pro Gly Leu Pro Ala Arg Pro Glu Ala
 290 295 300
 Arg Lys Val Thr Ser Ala Asn Arg Ala Arg Phe Arg Arg Ala Ala Asn
 305 310 315 320
 Arg His Pro Gln Phe Pro Gln Tyr Asn Tyr Gln Thr Leu Val Pro Glu
 325 330 335
 Asn Glu Ala Ala Gly Thr Ala Val Leu Arg Val Val Ala Gln Asp Pro
 340 345 350
 Asp Ala Gly Glu Ala Gly Arg Leu Val Tyr Ser Leu Ala Ala Leu Met
 355 360 365
 Asn Ser Arg Ser Leu Glu Leu Phe Ser Ile Asp Pro Gln Ser Gly Leu
 370 375 380
 Ile Arg Thr Ala Ala Ala Leu Asp Arg Glu Ser Met Glu Arg His Tyr
 385 390 395 400
 Leu Arg Val Thr Ala Gln Asp His Gly Ser Pro Arg Leu Ser Ala Thr
 405 410 415
 Thr Met Val Ala Val Thr Val Ala Asp Arg Asn Asp His Ser Pro Val
 420 425 430
 Phe Glu Gln Ala Gln Tyr Arg Glu Thr Leu Arg Glu Asn Val Glu Glu
 435 440 445
 Gly Tyr Pro Ile Leu Gln Leu Arg Ala Thr Asp Gly Asp Ala Pro Pro
 450 455 460
 Asn Ala Asn Leu Arg Tyr Arg Phe Val Gly Pro Pro Ala Ala Arg Ala
 465 470 475 480
 Ala Ala Ala Ala Ala Phe Glu Ile Asp Pro Arg Ser Gly Leu Ile Ser
 485 490 495
 Thr Ser Gly Arg Leu Asp Arg Glu His Met Glu Ser Tyr Glu Leu Val
 500 505 510
 Val Glu Ala Arg Asp Gln Gly Gln Glu Pro Gly Pro Arg Ser Ala Thr

515					520					525				
Val Arg	Val His	Ile Thr	Val Leu	Asp Glu	Asn Asp	Asn Ala	Pro Gln							
530			535		540									
Phe Ser	Glu Lys	Arg Tyr	Val Ala	Gln Val	Arg Glu	Asp Val	Arg Pro							
545		550			555		560							
His Thr	Val Val	Leu Arg	Val Thr	Ala Thr	Asp Arg	Asp Lys	Asp Ala							
		565			570		575							
Asn Gly	Leu Val	His Tyr	Asn Ile	Ile Ser	Gly Asn	Ser Arg	Gly His							
	580			585			590							
Phe Ala	Ile Asp	Ser Leu	Thr Gly	Glu Ile	Gln Val	Val Ala	Pro Leu							
	595		600			605								
Asp Phe	Glu Ala	Glu Arg	Glu Tyr	Ala Leu	Arg Ile	Arg Ala	Gln Asp							
610			615			620								
Ala Gly	Arg Pro	Pro Leu	Ser Asn	Asn Thr	Gly Leu	Ala Ser	Ile Gln							
625		630			635		640							
Val Val	Asp Ile	Asn Asp	His Ile	Pro Ile	Phe Val	Ser Thr	Pro Phe							
		645			650		655							
Gln Val	Ser Val	Leu Glu	Asn Ala	Pro Leu	Gly His	Ser Val	Ile His							
		660		665			670							
Ile Gln	Ala Val	Asp Ala	Asp His	Gly Glu	Asn Ala	Arg Leu	Glu Tyr							
	675		680			685								
Ser Leu	Thr Gly	Val Ala	Pro Asp	Thr Pro	Phe Val	Ile Asn	Ser Ala							
690			695			700								
Thr Gly	Trp Val	Ser Val	Ser Gly	Pro Leu	Asp Arg	Glu Ser	Val Glu							
705		710			715		720							
His Tyr	Phe Phe	Gly Val	Glu Ala	Arg Asp	His Gly	Ser Pro	Pro Leu							
		725			730		735							
Ser Ala	Ser Ala	Ser Val	Thr Val	Thr Val	Leu Asp	Val Asn	Asp Asn							
		740		745		750								
Arg Pro	Glu Phe	Thr Met	Lys Glu	Tyr His	Leu Arg	Leu Asn	Glu Asp							
	755		760			765								
Ala Ala	Val Gly	Thr Ser	Val Val	Ser Val	Thr Ala	Val Asp	Arg Asp							
	770		775			780								
Ala Asn	Ser Ala	Ile Ser	Tyr Gln	Ile Thr	Gly Gly	Asn Thr	Arg Asn							
785		790			795		800							
Arg Phe	Ala Ile	Ser Thr	Gln Gly	Gly Val	Gly Leu	Val Thr	Leu Ala							
		805		810			815							
Leu Pro	Leu Asp	Tyr Lys	Gln Gln	Arg Tyr	Phe Lys	Leu Val	Leu Thr							

1125	1130	1135
Glu Tyr Val Ile Val Val Gln Ala Thr Ser Ala Pro Leu Val Ser Arg 1140 1145 1150		
Ala Thr Val His Val Arg Leu Val Asp Gln Asn Asp Asn Ser Pro Val 1155 1160 1165		
Leu Asn Asn Phe Gln Ile Leu Phe Asn Asn Tyr Val Ser Asn Arg Ser 1170 1175 1180		
Asp Thr Phe Pro Ser Gly Ile Ile Gly Arg Ile Pro Ala Tyr Asp Pro 1185 1190 1195 1200		
Asp Val Ser Asp His Leu Phe Tyr Ser Phe Glu Arg Gly Asn Glu Leu 1205 1210 1215		
Gln Leu Leu Val Val Asn Gln Thr Ser Gly Glu Leu Arg Leu Ser Arg 1220 1225 1230		
Lys Leu Asp Asn Asn Arg Pro Leu Val Ala Ser Met Leu Val Thr Val 1235 1240 1245		
Thr Asp Gly Leu His Ser Val Thr Ala Gln Cys Val Leu Arg Val Val 1250 1255 1260		
Ile Ile Thr Glu Glu Leu Leu Ala Asn Ser Leu Thr Val Arg Leu Glu 1265 1270 1275 1280		
Asn Met Trp Gln Glu Arg Phe Leu Ser Pro Leu Leu Gly Arg Phe Leu 1285 1290 1295		
Glu Gly Val Ala Ala Val Leu Ala Thr Pro Ala Glu Asp Val Phe Ile 1300 1305 1310		
Phe Asn Ile Gln Asn Asp Thr Asp Val Gly Gly Thr Val Leu Asn Val 1315 1320 1325		
Ser Phe Ser Ala Leu Ala Pro Arg Gly Ala Gly Ala Ala Gly 1330 1335 1340		
Pro Trp Phe Ser Ser Glu Glu Leu Gln Glu Gln Leu Tyr Val Arg Arg 1345 1350 1355 1360		
Ala Ala Leu Ala Ala Arg Ser Leu Leu Asp Val Leu Pro Phe Asp Asp 1365 1370 1375		
Asn Val Cys Leu Arg Glu Pro Cys Glu Asn Tyr Met Lys Cys Val Ser 1380 1385 1390		
Val Leu Arg Phe Asp Ser Ser Ala Pro Phe Leu Ala Ser Ala Ser Thr 1395 1400 1405		
Leu Phe Arg Pro Ile Gln Pro Ile Ala Gly Leu Arg Cys Arg Cys Pro 1410 1415 1420		
Pro Gly Phe Thr Gly Asp Phe Cys Gln Thr Glu Leu Asp Leu Cys Tyr		

1425	1430	1435	1440
Ser Asn Pro Cys Arg Asn Gly Gly Ala Cys Ala Arg Arg Glu Gly Gly			
1445	1450	1455	
Tyr Thr Cys Val Cys Arg Pro Arg Phe Thr Gly Glu Asp Cys Glu Leu			
1460	1465	1470	
Asp Thr Glu Ala Gly Arg Cys Val Pro Gly Val Cys Arg Asn Gly Gly			
1475	1480	1485	
Thr Cys Thr Asp Ala Pro Asn Gly Gly Phe Arg Cys Gln Cys Pro Ala			
1490	1495	1500	
Gly Gly Ala Phe Glu Gly Pro Arg Cys Glu Val Ala Ala Arg Ser Phe			
1505	1510	1515	1520
Pro Pro Ser Ser Phe Val Met Phe Arg Gly Leu Arg Gln Arg Phe His			
1525	1530	1535	
Leu Thr Leu Ser Leu Ser Phe Ala Thr Val Gln Gln Ser Gly Leu Leu			
1540	1545	1550	
Phe Tyr Asn Gly Arg Leu Asn Glu Lys His Asp Phe Leu Ala Leu Glu			
1555	1560	1565	
Leu Val Ala Gly Gln Val Arg Leu Thr Tyr Ser Thr Gly Glu Ser Asn			
1570	1575	1580	
Thr Val Val Ser Pro Thr Val Pro Gly Gly Leu Ser Asp Gly Gln Trp			
1585	1590	1595	1600
His Thr Val His Leu Arg Tyr Tyr Asn Lys Pro Arg Thr Asp Ala Leu			
1605	1610	1615	
Gly Gly Ala Gln Gly Pro Ser Lys Asp Lys Val Ala Val Leu Ser Val			
1620	1625	1630	
Asp Asp Cys Asp Val Ala Val Ala Leu Gln Phe Gly Ala Glu Ile Gly			
1635	1640	1645	
Asn Tyr Ser Cys Ala Ala Ala Gly Val Gln Thr Ser Ser Lys Lys Ser			
1650	1655	1660	
Leu Asp Leu Thr Gly Pro Leu Leu Leu Gly Gly Val Pro Asn Leu Pro			
1665	1670	1675	1680
Glu Asn Phe Pro Val Ser His Lys Asp Phe Ile Gly Cys Met Arg Asp			
1685	1690	1695	
Leu His Ile Asp Gly Arg Arg Val Asp Met Ala Ala Phe Val Ala Asn			
1700	1705	1710	
Asn Gly Thr Met Ala Gly Cys Gln Ala Lys Leu His Phe Cys Asp Ser			
1715	1720	1725	
Gly Pro Cys Lys Asn Ser Gly Phe Cys Ser Glu Arg Trp Gly Ser Phe			

1730	1735	1740
Ser Cys Asp Cys Pro Val Gly Phe Gly Gly Lys Asp Cys Gln Leu Thr 1745 1750 1755 1760		
Met Ala His Pro His His Phe Arg Gly Asn Gly Thr Leu Ser Trp Asn 1765 1770 1775		
Phe Gly Ser Asp Met Ala Val Ser Val Pro Trp Tyr Leu Gly Leu Ala 1780 1785 1790		
Phe Arg Thr Arg Ala Thr Gln Gly Val Leu Met Gln Val Gln Ala Gly 1795 1800 1805		
Pro His Ser Thr Leu Leu Cys Gln Leu Asp Arg Gly Leu Leu Ser Val 1810 1815 1820		
Thr Val Thr Arg Gly Ser Gly Arg Ala Ser His Leu Leu Leu Asp Gln 1825 1830 1835 1840		
Val Thr Val Ser Asp Gly Arg Trp His Asp Leu Arg Leu Glu Leu Gln 1845 1850 1855		
Glu Glu Pro Gly Gly Arg Arg Gly His His Val Leu Met Val Ser Leu 1860 1865 1870		
Asp Phe Ser Leu Phe Gln Asp Thr Met Ala Val Gly Ser Glu Leu Gln 1875 1880 1885		
Gly Leu Lys Val Lys Gln Leu His Val Gly Gly Leu Pro Pro Gly Ser 1890 1895 1900		
Ala Glu Glu Ala Pro Gln Gly Leu Val Gly Cys Ile Gln Gly Val Trp 1905 1910 1915 1920		
Leu Gly Ser Thr Pro Ser Gly Ser Pro Ala Leu Leu Pro Pro Ser His 1925 1930 1935		
Arg Val Asn Ala Glu Pro Gly Cys Val Val Thr Asn Ala Cys Ala Ser 1940 1945 1950		
Gly Pro Cys Pro Pro His Ala Asp Cys Arg Asp Leu Trp Gln Thr Phe 1955 1960 1965		
Ser Cys Thr Cys Gln Pro Gly Tyr Tyr Gly Pro Gly Cys Val Asp Ala 1970 1975 1980		
Cys Leu Leu Asn Pro Cys Gln Asn Gln Gly Ser Cys Arg His Leu Pro 1985 1990 1995 2000		
Gly Ala Pro His Gly Tyr Thr Cys Asp Cys Val Gly Gly Tyr Phe Gly 2005 2010 2015		
His His Cys Glu His Arg Met Asp Gln Gln Cys Pro Arg Gly Trp Trp 2020 2025 2030		
Gly Ser Pro Thr Cys Gly Pro Cys Asn Cys Asp Val His Lys Gly Phe		

2035	2040	2045
Asp Pro Asn Cys Asn Lys Thr Asn Gly Gln Cys His Cys Lys Glu Phe 2050	2055	2060
His Tyr Arg Pro Arg Gly Ser Asp Ser Cys Leu Pro Cys Asp Cys Tyr 2065	2070	2075 2080
Pro Val Gly Ser Thr Ser Arg Ser Cys Ala Pro His Ser Gly Gln Cys 2085	2090	2095
Pro Cys Arg Pro Gly Ala Leu Gly Arg Gln Cys Asn Ser Cys Asp Ser 2100	2105	2110
Pro Phe Ala Glu Val Thr Ala Ser Gly Cys Arg Val Leu Tyr Asp Ala 2115	2120	2125
Cys Pro Lys Ser Leu Arg Ser Gly Val Trp Trp Pro Gln Thr Lys Phe 2130	2135	2140
Gly Val Leu Ala Thr Val Pro Cys Pro Arg Gly Ala Leu Gly Ala Ala 2145	2150	2155 2160
Val Arg Leu Cys Asp Glu Ala Gln Gly Trp Leu Glu Pro Asp Leu Phe 2165	2170	2175
Asn Cys Thr Ser Pro Ala Phe Arg Glu Leu Ser Leu Leu Leu Asp Gly 2180	2185	2190
Leu Glu Leu Asn Lys Thr Ala Leu Asp Thr Met Glu Ala Lys Lys Leu 2195	2200	2205
Ala Gln Arg Leu Arg Glu Val Thr Gly His Thr Asp His Tyr Phe Ser 2210	2215	2220
Gln Asp Val Arg Val Thr Ala Arg Leu Leu Ala His Leu Leu Ala Phe 2225	2230	2235 2240
Glu Ser His Gln Gln Gly Phe Gly Leu Thr Ala Thr Gln Asp Ala His 2245	2250	2255
Phe Asn Glu Asn Leu Leu Trp Ala Gly Ser Ala Leu Leu Ala Pro Glu 2260	2265	2270
Thr Gly Asp Leu Trp Ala Ala Leu Gly Gln Arg Ala Pro Gly Gly Ser 2275	2280	2285
Pro Gly Ser Ala Gly Leu Val Arg His Leu Glu Glu Tyr Ala Ala Thr 2290	2295	2300
Leu Ala Arg Asn Met Glu Leu Thr Tyr Leu Asn Pro Met Gly Leu Val 2305	2310	2315 2320
Thr Pro Asn Ile Met Leu Ser Ile Asp Arg Met Glu His Pro Ser Ser 2325	2330	2335
Pro Arg Gly Ala Arg Arg Tyr Pro Arg Tyr His Ser Asn Leu Phe Arg		

[illegible]

2645

2650

2655

Leu Gly Leu Ala Val Gly Leu Asp Pro Glu Gly Tyr Gly Asn Pro Asp
 2660 2665 2670

Phe Cys Trp Ile Ser Val His Glu Pro Leu Ile Trp Ser Phe Ala Gly
 2675 2680 2685

Pro Val Val Leu Val Ile Val Met Asn Gly Thr Met Phe Leu Leu Ala
 2690 2695 2700

Ala Arg Thr Ser Cys Ser Thr Gly Gln Arg Glu Ala Lys Lys Thr Ser
 2705 2710 2715 2720

Ala Leu Thr Leu Arg Ser Ser Phe Leu Leu Leu Leu Leu Val Ser Ala
 2725 2730 2735

Ser Trp Leu Phe Gly Leu Leu Ala Val Asn His Ser Ile Leu Ala Phe
 2740 2745 2750

His Tyr Leu His Ala Gly Leu Cys Gly Leu Gln Gly Leu Ala Val Leu
 2755 2760 2765

Leu Leu Phe Cys Val Leu Asn Ala Asp Ala Arg Ala Ala Trp Met Pro
 2770 2775 2780

Ala Cys Leu Gly Arg Lys Ala Ala Pro Glu Glu Ala Arg Pro Ala Pro
 2785 2790 2795 2800

Gly Leu Gly Pro Gly Ala Tyr Asn Asn Thr Ala Leu Phe Glu Glu Ser
 2805 2810 2815

Gly Leu Ile Arg Ile Thr Leu Gly Ala Ser Thr Val Ser Ser Val Ser
 2820 2825 2830

Ser Ala Arg Ser Gly Arg Thr Gln Asp Gln Asp Ser Gln Arg Gly Arg
 2835 2840 2845

Ser Tyr Leu Arg Asp Asn Val Leu Val Arg His Gly Ser Ala Ala Asp
 2850 2855 2860

His Thr Asp His Ser Leu Gln Ala His Ala Gly Pro Thr Asp Leu Asp
 2865 2870 2875 2880

Val Ala Met Phe His Arg Asp Ala Gly Ala Asp Ser Asp Ser Asp Ser
 2885 2890 2895

Asp Leu Ser Leu Glu Glu Glu Arg Ser Leu Ser Ile Pro Ser Ser Glu
 2900 2905 2910

Ser Glu Asp Asn Gly Arg Thr Arg Gly Arg Phe Gln Arg Pro Leu Cys
 2915 2920 2925

Arg Ala Ala Gln Ser Glu Arg Leu Leu Thr His Pro Lys Asp Val Asp
 2930 2935 2940

Gly Asn Asp Leu Leu Ser Tyr Trp Pro Ala Leu Gly Glu Cys Glu Ala

2945	2950	2955	2960
Ala Pro Cys Ala Leu Gln Thr Trp Gly Ser Glu Arg Arg Leu Gly Leu			
2965		2970	2975
Asp Thr Ser Lys Asp Ala Ala Asn Asn Asn Gln Pro Asp Pro Ala Leu			
2980	2985		2990
Thr Ser Gly Asp Glu Thr Ser Leu Gly Arg Ala Gln Arg Gln Arg Lys			
2995	3000		3005
Gly Ile Leu Lys Asn Arg Leu Gln Tyr Pro Leu Val Pro Gln Thr Arg			
3010	3015		3020
Gly Ala Pro Glu Leu Ser Trp Cys Arg Ala Ala Thr Leu Gly His Arg			
3025	3030	3035	3040
Ala Val Pro Ala Ala Ser Tyr Gly Arg Ile Tyr Ala Gly Gly Gly Thr			
	3045	3050	3055
Gly Ser Leu Ser Gln Pro Ala Ser Arg Tyr Ser Ser Arg Glu Gln Leu			
	3060	3065	3070
Asp Leu Leu Leu Arg Arg Gln Leu Ser Arg Glu Arg Leu Glu Glu Ala			
	3075	3080	3085
Pro Ala Pro Val Leu Arg Pro Leu Ser Arg Pro Gly Ser Gln Glu Cys			
	3090	3095	3100
Met Asp Ala Ala Pro Gly Arg Leu Glu Pro Lys Asp Arg Gly Ser Thr			
3105	3110	3115	3120
Leu Pro Arg Arg Gln Pro Pro Arg Asp Tyr Pro Gly Ala Met Ala Gly			
	3125	3130	3135
Arg Phe Gly Ser Arg Asp Ala Leu Asp Leu Gly Ala Pro Arg Glu Trp			
	3140	3145	3150
Leu Ser Thr Leu Pro Pro Pro Arg Arg Thr Arg Asp Leu Asp Pro Gln			
	3155	3160	3165
Pro Pro Pro Leu Pro Leu Ser Pro Gln Arg Gln Leu Ser Arg Asp Pro			
	3170	3175	3180
Leu Leu Pro Ser Arg Pro Leu Asp Ser Leu Ser Arg Ser Ser Asn Ser			
3185	3190	3195	3200
Arg Glu Gln Leu Asp Gln Val Pro Ser Arg His Pro Ser Arg Glu Ala			
	3205	3210	3215
Leu Gly Pro Leu Pro Gln Leu Leu Arg Ala Arg Glu Asp Ser Val Ser			
	3220	3225	3230
Gly Pro Ser His Gly Pro Ser Thr Glu Gln Leu Asp Ile Leu Ser Ser			
3235	3240		3245
Ile Leu Ala Ser Phe Asn Ser Ser Ala Leu Ser Ser Val Gln Ser Ser			

3250

3255

3260

Ser Thr Pro Leu Gly Pro His Thr Thr Ala Thr Pro Ser Ala Thr Ala
 3265 3270 3275 3280

Ser Val Leu Gly Pro Ser Thr Pro Arg Ser Ala Thr Ser His Ser Ile
 3285 3290 3295

Ser Glu Leu Ser Pro Asp Ser Glu Val Pro Arg Ser Glu Gly His Ser
 3300 3305 3310

<210> 68

<211> 3301

<212> PRT

<213> Mus musculus

<400> 68

Met Ala Arg Arg Pro Leu Trp Trp Gly Leu Pro Gly Pro Ser Thr Pro
 1 5 10 15

Val Leu Leu Leu Leu Leu Ser Leu Phe Pro Phe Ser Arg Glu Glu
 20 25 30

Leu Gly Gly Gly Gly Asp Gln Asp Trp Asp Pro Gly Val Ala Thr Thr
 35 40 45

Thr Gly Pro Arg Ala Gln Ile Gly Ser Gly Ala Val Ala Leu Cys Pro
 50 55 60

Glu Ser Pro Gly Val Trp Glu Asp Gly Asp Pro Gly Leu Gly Val Arg
 65 70 75 80

Glu Pro Val Phe Met Arg Leu Arg Val Gly Arg Gln Asn Ala Arg Asn
 85 90 95

Gly Arg Gly Ala Pro Glu Gln Pro Asn Ala Glu Val Val Val Gln Ala
 100 105 110

Leu Gly Ser Arg Glu Gln Glu Ala Gly Gln Gly Pro Gly Tyr Leu Leu
 115 120 125

Cys Trp His Pro Glu Ile Ser Ser Cys Gly Arg Thr Gly Pro Leu Arg
 130 135 140

Arg Gly Ser Leu Pro Leu Asp Ala Leu Ser Pro Gly Asp Ser Asp Leu
 145 150 155 160

Arg Asn Ser Ser Pro His Pro Ser Glu Leu Leu Ala Gln Pro Asp Gly
 165 170 175

Ser Arg Pro Val Ala Ile Gln Arg Asn Ala Arg Arg Ser Ile Arg Lys
 180 185 190

Arg Val Glu Thr Ser Arg Cys Cys Gly Lys Leu Trp Glu Pro Gly His
 195 200 205
 Lys Gly Gln Gly Glu Arg Ser Ala Thr Ser Thr Val Glu Arg Gly Pro
 210 215 220
 Phe Arg Arg Asp Cys Leu Pro Gly Ser Leu Gly Ser Gly Leu Gly Glu
 225 230 235 240
 Asp Ser Ala Pro Arg Ala Val Arg Thr Ala Pro Thr Pro Gly Ser Ala
 245 250 255
 Pro Arg Glu Ser Arg Thr Ala Pro Gly Arg Met Arg Ser Arg Gly Leu
 260 265 270
 Phe Arg Arg Arg Phe Leu Phe Glu Arg Pro Gly Pro Arg Pro Pro Gly
 275 280 285
 Phe Pro Thr Gly Pro Glu Ala Lys Gln Ile Leu Ser Thr Asn Gln Ala
 290 295 300
 Arg Pro Arg Arg Ala Ala Asn Arg His Pro Gln Phe Pro Gln Tyr Asn
 305 310 315 320
 Tyr Gln Thr Leu Val Pro Glu Asn Glu Ala Ala Gly Thr Ser Val Leu
 325 330 335
 Arg Val Val Ala Gln Asp Pro Asp Pro Gly Glu Ala Gly Arg Leu Ile
 340 345 350
 Tyr Ser Leu Ala Ala Leu Met Asn Ser Arg Ser Leu Glu Leu Phe Ser
 355 360 365
 Ile Asp Pro Gln Ser Gly Leu Ile Arg Thr Ala Ala Ala Leu Asp Arg
 370 375 380
 Glu Ser Met Glu Arg His Tyr Leu Arg Val Thr Ala Gln Asp His Gly
 385 390 395 400
 Ser Pro Arg Leu Ser Ala Thr Thr Met Val Ala Val Thr Val Ala Asp
 405 410 415
 Arg Asn Asp His Ala Pro Val Phe Glu Gln Ala Gln Tyr Arg Glu Thr
 420 425 430
 Leu Arg Glu Asn Val Glu Glu Gly Tyr Pro Ile Leu Gln Leu Arg Ala
 435 440 445
 Thr Asp Gly Asp Ala Pro Pro Asn Ala Asn Leu Arg Tyr Arg Phe Val
 450 455 460
 Gly Ser Pro Ala Val Arg Thr Ala Ala Ala Ala Phe Glu Ile Asp
 465 470 475 480
 Pro Arg Ser Gly Leu Ile Ser Thr Ser Gly Arg Val Asp Arg Glu His
 485 490 495

Met Glu Ser Tyr Glu Leu Val Val Glu Ala Ser Asp Gln Gly Gln Glu
 500 505 510
 Pro Gly Pro Arg Ser Ala Thr Val Arg Val His Ile Thr Val Leu Asp
 515 520 525
 Glu Asn Asp Asn Ala Pro Gln Phe Gly Glu Lys Arg Tyr Val Ala Gln
 530 535 540
 Val Arg Glu Asn Val Arg Pro His Thr Val Val Leu Arg Val Thr Ala
 545 550 555 560
 Thr Asp Lys Asp Lys Asp Ala Asn Gly Leu Val His Tyr Asn Ile Ile
 565 570 575
 Ser Gly Asn Ser Arg Gly His Phe Ala Ile Asp Ser Leu Thr Gly Glu
 580 585 590
 Ile Gln Val Met Ala Pro Leu Asp Phe Glu Ala Glu Arg Glu Tyr Ala
 595 600 605
 Leu Arg Ile Arg Ala Gln Asp Ala Gly Arg Pro Pro Leu Ser Asn Asn
 610 615 620
 Thr Gly Leu Ala Ser Ile Gln Val Val Asp Ile Asn Asp His Ala Pro
 625 630 635 640
 Ile Phe Val Ser Thr Pro Phe Gln Val Ser Val Leu Glu Asn Ala Pro
 645 650 655
 Leu Gly His Ser Val Ile His Ile Gln Ala Val Asp Ala Asp His Gly
 660 665 670
 Glu Asn Ser Arg Leu Glu Tyr Ser Leu Thr Gly Val Ala Ser Asp Thr
 675 680 685
 Pro Phe Val Ile Asn Ser Ala Thr Gly Trp Val Ser Val Ser Gly Pro
 690 695 700
 Leu Asp Arg Glu Ser Val Glu His Tyr Phe Phe Gly Val Glu Ala Arg
 705 710 715 720
 Asp His Gly Ser Pro Pro Leu Ser Ala Ser Ala Ser Val Thr Val Thr
 725 730 735
 Val Leu Asp Val Asn Asp Asn Arg Pro Glu Phe Thr Met Lys Glu Tyr
 740 745 750
 His Leu Arg Leu Asn Glu Asp Ala Ala Val Gly Thr Ser Val Val Ser
 755 760 765
 Val Thr Ala Val Asp Arg Asp Ala Asn Ser Ala Ile Ser Tyr Gln Ile
 770 775 780
 Thr Gly Gly Asn Thr Arg Asn Arg Phe Ala Ile Ser Thr Gln Gly Gly
 785 790 795 800

Val Gly Leu Val Thr Leu Ala Leu Pro Leu Asp Tyr Lys Gln Glu Arg
 805 810 815
 Tyr Phe Lys Leu Val Leu Thr Ala Ser Asp Arg Ala Leu His Asp His
 820 825 830
 Cys Tyr Val His Ile Asn Ile Thr Asp Ala Asn Thr His Arg Pro Val
 835 840 845
 Phe Gln Ser Ala His Tyr Ser Val Ser Met Asn Glu Asp Arg Pro Val
 850 855 860
 Gly Ser Thr Val Val Val Ile Ser Ala Ser Asp Asp Asp Val Gly Glu
 865 870 875 880
 Asn Ala Arg Ile Thr Tyr Leu Leu Glu Asp Asn Leu Pro Gln Phe Arg
 885 890 895
 Ile Asp Ala Asp Ser Gly Ala Ile Thr Leu Gln Ala Pro Leu Asp Tyr
 900 905 910
 Glu Asp Gln Val Thr Tyr Thr Leu Ala Ile Thr Ala Arg Asp Asn Gly
 915 920 925
 Ile Pro Gln Lys Ala Asp Thr Thr Tyr Val Glu Val Met Val Asn Asp
 930 935 940
 Val Asn Asp Asn Ala Pro Gln Phe Val Ala Ser His Tyr Thr Gly Leu
 945 950 955 960
 Val Ser Glu Asp Ala Pro Pro Phe Thr Ser Val Leu Gln Ile Ser Ala
 965 970 975
 Thr Asp Arg Asp Ala His Ala Asn Gly Arg Val Gln Tyr Thr Phe Gln
 980 985 990
 Asn Gly Glu Asp Gly Asp Gly Asp Phe Thr Ile Glu Pro Thr Ser Gly
 995 1000 1005
 Ile Val Arg Thr Val Arg Arg Leu Asp Arg Glu Ala Val Pro Val Tyr
 1010 1015 1020
 Glu Leu Thr Ala Tyr Ala Val Asp Arg Gly Val Pro Pro Leu Arg Thr
 1025 1030 1035 1040
 Pro Val Ser Ile Gln Val Thr Val Gln Asp Val Asn Asp Asn Ala Pro
 1045 1050 1055
 Val Phe Pro Ala Glu Glu Phe Glu Val Arg Val Lys Glu Asn Ser Ile
 1060 1065 1070
 Val Gly Ser Val Val Ala Gln Ile Thr Ala Val Asp Pro Asp Asp Gly
 1075 1080 1085
 Pro Asn Ala His Ile Met Tyr Gln Ile Val Glu Gly Asn Ile Pro Glu
 1090 1095 1100

Leu Phe Gln Met Asp Ile Phe Ser Gly Glu Leu Thr Ala Leu Ile Asp
 1105 1110 1115 1120
 Leu Asp Tyr Glu Ala Arg Gln Glu Tyr Val Ile Val Val Gln Ala Thr
 1125 1130 1135
 Ser Ala Pro Leu Val Ser Arg Ala Thr Val His Val Arg Leu Val Asp
 1140 1145 1150
 Gln Asn Asp Asn Ser Pro Val Leu Asn Asn Phe Gln Ile Leu Phe Asn
 1155 1160 1165
 Asn Tyr Val Ser Asn Arg Ser Asp Thr Phe Pro Ser Gly Ile Ile Gly
 1170 1175 1180
 Arg Ile Pro Ala Tyr Asp Pro Asp Val Ser Asp His Leu Phe Tyr Ser
 1185 1190 1195 1200
 Phe Glu Arg Gly Asn Glu Leu Gln Leu Leu Val Val Asn Arg Thr Ser
 1205 1210 1215
 Gly Glu Leu Arg Leu Ser Arg Lys Leu Asp Asn Asn Arg Pro Leu Val
 1220 1225 1230
 Ala Ser Met Leu Val Thr Val Thr Asp Gly Leu His Ser Val Thr Ala
 1235 1240 1245
 Gln Cys Val Leu Arg Val Val Ile Ile Thr Glu Glu Leu Leu Ala Asn
 1250 1255 1260
 Ser Leu Thr Val Arg Leu Glu Asn Met Trp Gln Glu Arg Phe Leu Ser
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 Pro Leu Leu Gly His Phe Leu Glu Gly Val Ala Ala Val Leu Ala Thr
 1285 1290 1295
 Pro Thr Glu Asp Val Phe Ile Phe Asn Ile Gln Asn Asp Thr Asp Val
 1300 1305 1310
 Gly Gly Thr Val Leu Asn Val Ser Phe Ser Ala Leu Ala Pro Arg Gly
 1315 1320 1325
 Ala Gly Ala Gly Ala Ala Gly Pro Trp Phe Ser Ser Glu Glu Leu Gln
 1330 1335 1340
 Glu Gln Leu Tyr Val Arg Ala Ala Leu Ala Ala Arg Ser Leu Leu
 1345 1350 1355 1360
 Asp Val Leu Pro Phe Asp Asp Asn Val Cys Leu Arg Glu Pro Cys Glu
 1365 1370 1375
 Asn Tyr Met Lys Cys Val Ser Val Leu Arg Phe Asp Ser Ser Ala Pro
 1380 1385 1390
 Phe Leu Ala Ser Thr Ser Thr Leu Phe Arg Pro Ile Gln Pro Ile Ala
 1395 1400 1405

Gly Leu Arg Cys Arg Cys Pro Pro Gly Phe Thr Gly Asp Phe Cys Glu
 1410 1415 1420
 Thr Glu Leu Asp Leu Cys Tyr Ser Asn Pro Cys Arg Asn Gly Gly Ala
 1425 1430 1435 1440
 Cys Ala Arg Arg Glu Gly Gly Tyr Thr Cys Val Cys Arg Pro Arg Phe
 1445 1450 1455
 Thr Asn Cys Glu Leu Asp Thr Glu Ala Glv Arg Cys Val Pro Glv Val
 1460 1465 1470
 Cys Arg Asn Gly Gly Thr Cys Thr Asn Ala Pro Asn Gly Gly Phe Arg
 1475 1480 1485
 Cys Gln Cys Pro Ala Gly Gly Ala Phe Glu Gly Pro Arg Cys Glu Val
 1490 1495 1500
 Ala Ala Arg Ser Phe Pro Pro Ser Ser Phe Val Met Phe Arg Gly Leu
 1505 1510 1515 1520
 Arg Gln Arg Phe His Leu Thr Leu Ser Leu Ser Phe Ala Thr Val Gln
 1525 1530 1535
 Pro Ser Gly Leu Leu Phe Tyr Asn Gly Arg Leu Asn Glu Lys His Asp
 1540 1545 1550
 Phe Leu Ala Leu Glu Leu Val Ala Gly Gln Val Arg Leu Thr Tyr Ser
 1555 1560 1565
 Thr Gly Glu Ser Asn Thr Val Val Ser Pro Thr Val Pro Gly Gly Leu
 1570 1575 1580
 Ser Asp Gly Gln Trp His Thr Val His Leu Arg Tyr Tyr Asn Lys Pro
 1585 1590 1595 1600
 Arg Thr Asp Ala Leu Gly Gly Ala Gln Gly Pro Ser Lys Asp Lys Val
 1605 1610 1615
 Ala Val Leu Ser Val Asp Asp Cys Asn Val Ala Val Ala Leu Gln Phe
 1620 1625 1630
 Gly Ala Glu Ile Gly Asn Tyr Ser Cys Ala Ala Ala Gly Val Gln Thr
 1635 1640 1645
 Ser Ser Lys Lys Ser Leu Asp Leu Thr Gly Pro Leu Leu Leu Gly Gly
 1650 1655 1660
 Val Pro Asn Leu Pro Glu Asn Phe Pro Val Ser His Lys Asp Phe Ile
 1665 1670 1675 1680
 Gly Cys Met Arg Asp Leu His Ile Asp Gly Arg Arg Met Asp Met Ala
 1685 1690 1695
 Ala Phe Val Ala Asn Asn Gly Thr Met Ala Gly Cys Gln Ala Lys Ser
 1700 1705 1710

His Phe Cys Ala Ser Gly Pro Cys Lys Asn Asn Gly Phe Cys Ser Glu
 1715 1720 1725
 Arg Trp Gly Gly Phe Ser Cys Asp Cys Pro Val Gly Phe Gly Gly Lys
 1730 1735 1740
 Asp Cys Arg Leu Thr Met Ala His Pro Tyr His Phe Gln Gly Asn Gly
 1745 1750 1755 1760
 Thr Leu Ser Trp Asp Phe Gly Asn Asn Met Ala Val Ser Val Pro Trp
 1765 1770 1775
 Tyr Leu Gly Leu Ser Phe Arg Thr Arg Ala Thr Lys Gly Ile Leu Met
 1780 1785 1790
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 1860 1865 1870
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 1875 1880 1885
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 1890 1895 1900
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 1905 1910 1915 1920
 Leu Pro Pro Ser His Arg Val Asn Val Glu Pro Gly Cys Thr Val Thr
 1925 1930 1935
 Asn Pro Cys Ala Ser Gly Pro Cys Pro Pro His Ala Asp Cys Lys Asp
 1940 1945 1950
 Leu Trp Gln Thr Phe Ser Cys Thr Cys Arg Pro Gly Tyr Tyr Gly Pro
 1955 1960 1965
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 1970 1975 1980
 Cys Arg His Leu Gln Gly Ala Pro His Gly Tyr Thr Cys Asp Cys Val
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 Ser Gly Tyr Phe Gly Gln His Cys Glu His Arg Val Asp Gln Gln Cys
 2005 2010 2015

Pro Arg Gly Trp Trp Gly Ser Pro Thr Cys Gly Pro Cys Asn Cys Asp
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<211> 3313

<212> PRT

<213> Rattus norvegicus

<400> 69

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Met Gly Gly Gly Gly Asp Gln Gly Trp Asp Pro Gly Val Ala Thr Ala
35 40 45

Thr Gly Pro Arg Ala Gln Ile Gly Ser Gly Ala Val Ala Leu Cys Pro
50 55 60

Glu Ser Pro Gly Val Trp Glu Asp Gly Asp Pro Gly Leu Gly Val Arg
65 70 75 80

Glu Pro Val Phe Met Lys Leu Arg Val Gly Arg Gln Asn Ala Arg Asn
85 90 95

Gly Arg Gly Ala Pro Glu Gln Pro Asn Arg Glu Pro Val Val Gln Ala
100 105 110

Leu Gly Ser Arg Glu Gln Glu Ala Gly Gln Gly Ser Gly Tyr Leu Leu
115 120 125

Cys Trp His Pro Glu Ile Ser Ser Cys Gly Arg Thr Gly His Leu Arg
130 135 140

Arg Gly Ser Leu Pro Leu Asp Ala Leu Ser Pro Gly Asp Ser Asp Leu
145 150 155 160

Arg Asn Ser Ser Pro His Pro Ser Glu Leu Leu Ala Gln Pro Asp Ser
165 170 175

Pro Arg Pro Val Ala Phe Gln Arg Asn Gly Arg Arg Ser Ile Arg Lys
180 185 190

Arg Val Glu Thr Phe Arg Cys Cys Gly Lys Leu Trp Glu Pro Gly His
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 Lys Gly Gln Gly Glu Arg Ser Ala Thr Ser Thr Val Asp Arg Gly Pro
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 Leu Arg Arg Asp Cys Leu Pro Gly Ser Leu Gly Ser Gly Leu Gly Glu
 225 230 235 240
 Asp Ser Ala Pro Arg Ala Val Arg Thr Ala Pro Ala Pro Gly Ser Ala
 245 250 255
 Pro His Glu Ser Arg Thr Ala Pro Glu Arg Met Arg Ser Arg Gly Leu
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 Phe Arg Arg Gly Phe Leu Phe Glu Arg Pro Gly Pro Arg Pro Pro Gly
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 Phe Pro Thr Gly Ala Glu Ala Lys Arg Ile Leu Ser Thr Asn Gln Ala
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 Arg Ser Arg Arg Ala Ala Asn Arg His Pro Gln Phe Pro Gln Tyr Asn
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 Tyr Gln Thr Leu Val Pro Glu Asn Glu Ala Ala Gly Thr Ala Val Leu
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 Ile Asp Pro Gln Ser Gly Leu Ile Arg Thr Ala Ala Ala Leu Asp Arg
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 Glu Ser Met Glu Arg His Tyr Leu Arg Val Thr Ala Gln Asp His Gly
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 Ser Pro Arg Leu Ser Ala Thr Thr Met Val Ala Val Thr Val Ala Asp
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 Arg Asn Asp His Ala Pro Val Phe Glu Gln Ala Gln Tyr Arg Glu Thr
 420 425 430
 Leu Arg Glu Asn Val Glu Glu Gly Tyr Pro Ile Leu Gln Leu Arg Ala
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 Thr Asp Gly Asp Ala Pro Pro Asn Ala Asn Leu Arg Tyr Arg Phe Val
 450 455 460
 Ser Ser Pro Ala Ala Arg Thr Ala Ala Ala Ala Phe Glu Ile Asp
 465 470 475 480
 Pro Arg Ser Gly Leu Ile Ser Thr Ser Gly Arg Val Asp Arg Glu His
 485 490 495

Met Glu Ser Tyr Glu Leu Val Val Glu Ala Ser Asp Gln Gly Gln Glu
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 Pro Gly Pro Arg Ser Ala Thr Val Arg Val His Ile Thr Val Leu Asp
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 Glu Asn Asp Asn Ala Pro Gln Phe Ser Glu Lys Arg Tyr Val Ala Gln
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 Val Arg Glu Asp Val Arg Pro His Thr Val Val Leu Arg Val Thr Ala
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 Thr Asp Lys Asp Lys Asp Ala Asn Gly Leu Val His Tyr Asn Ile Ile
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 Ser Gly Asn Ser Arg Gly His Phe Ala Ile Asp Ser Leu Thr Gly Glu
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 Ile Gln Val Met Ala Pro Leu Asp Phe Glu Ala Glu Arg Glu Tyr Ala
 595 600 605
 Leu Arg Ile Arg Ala Gln Asp Ala Gly Arg Pro Pro Leu Ser Asn Asn
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 Thr Gly Leu Ala Ser Ile Gln Val Val Asp Ile Asn Asp His Ser Pro
 625 630 635 640
 Ile Phe Val Ser Thr Pro Phe Gln Val Ser Val Leu Glu Asn Ala Pro
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 Leu Gly His Ser Val Ile His Ile Gln Ala Val Asp Ala Asp His Gly
 660 665 670
 Glu Asn Ser Arg Leu Glu Tyr Ser Leu Thr Gly Val Ala Ser Asp Thr
 675 680 685
 Pro Phe Val Ile Asn Ser Ala Thr Gly Trp Val Ser Val Ser Gly Pro
 690 695 700
 Leu Asp Arg Glu Ser Val Glu His Tyr Phe Phe Gly Val Glu Ala Arg
 705 710 715 720
 Asp His Gly Ser Pro Pro Leu Ser Ala Ser Ala Ser Val Thr Val Thr
 725 730 735
 Val Leu Asp Val Asn Asp Asn Arg Pro Glu Phe Thr Met Lys Glu Tyr
 740 745 750
 His Leu Arg Leu Asn Glu Asp Ala Ala Val Gly Thr Ser Val Val Ser
 755 760 765
 Val Thr Ala Val Asp Arg Asp Ala Asn Ser Ala Ile Ser Tyr Gln Ile
 770 775 780
 Thr Gly Gly Asn Thr Arg Asn Arg Phe Ala Ile Ser Thr Gln Gly Gly
 785 790 800

Met Gly Leu Val Thr Leu Ala Leu Pro Leu Asp Tyr Lys Gln Glu Arg
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 Tyr Phe Lys Leu Val Leu Thr Ala Ser Asp Arg Ala Leu His Asp His
 820 825 830
 Cys Tyr Val His Ile Asn Ile Thr Asp Ala Asn Thr His Arg Pro Val
 835 840 845
 Phe Gln Ser Ala His Tyr Ser Val Ser Met Asn Glu Asp Arg Pro Val
 850 855 860
 Gly Ser Thr Val Val Val Ile Ser Ala Ser Asp Asp Asp Val Gly Glu
 865 870 875 880
 Asn Ala Arg Ile Thr Tyr Leu Leu Glu Asp Asn Leu Pro Gln Phe Arg
 885 890 895
 Ile Asp Ala Asp Ser Gly Ala Ile Thr Leu Gln Ala Pro Leu Asp Tyr
 900 905 910
 Glu Asp Gln Val Thr Tyr Thr Leu Ala Ile Thr Ala Arg Asp Asn Gly
 915 920 925
 Ile Pro Gln Lys Ala Asp Thr Thr Tyr Val Glu Val Met Val Asn Asp
 930 935 940
 Val Asn Asp Asn Ala Pro Gln Phe Val Ala Ser His Tyr Thr Gly Leu
 945 950 955 960
 Val Ser Glu Asp Ala Pro Pro Phe Thr Ser Val Leu Gln Ile Ser Ala
 965 970 975
 Thr Asp Arg Asp Ala His Ala Asn Gly Arg Val Gln Tyr Thr Phe Gln
 980 985 990
 Asn Gly Glu Asp Gly Asp Gly Asp Phe Thr Ile Glu Pro Thr Ser Gly
 995 1000 1005
 Ile Val Arg Thr Val Arg Arg Leu Asp Arg Glu Ala Val Pro Val Tyr
 1010 1015 1020
 Glu Leu Thr Ala Tyr Ala Val Asp Arg Gly Val Pro Pro Leu Arg Thr
 1025 1030 1035 1040
 Pro Val Ser Ile Gln Val Thr Val Gln Asp Val Asn Asp Asn Ala Pro
 1045 1050 1055
 Val Phe Pro Ala Glu Glu Phe Glu Val Arg Val Lys Glu Asn Ser Ile
 1060 1065 1070
 Val Gly Ser Val Val Ala Gln Ile Thr Ala Val Asp Pro Asp Asp Gly
 1075 1080 1085
 Pro Asn Ala His Ile Met Tyr Gln Ile Val Glu Gly Asn Ile Pro Glu
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Leu Phe Gln Met Asp Ile Phe Ser Gly Glu Leu Thr Ala Leu Ile Asp
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Ser Ala Pro Leu Val Ser Arg Ala Thr Val His Val Arg Leu Val Asp
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Gln Asn Asp Asn Ser Pro Val Leu Asn Asn Phe Gln Ile Leu Phe Asn
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Gly Gly Thr Val Leu Asn Val Ser Phe Ser Ala Leu Ala Pro Arg Gly
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Glu Gln Leu Tyr Val Arg Arg Ala Ala Leu Ala Ala Arg Ser Leu Leu
1345 1350 1355 1360

Asp Val Leu Pro Phe Asp Asp Asn Val Cys Leu Arg Glu Pro Cys Glu
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 1890 1895 1900
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 1940 1945 1950
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 1955 1960 1965
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 2005 2010 2015

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 Tyr Leu Arg Asp Asn Val Leu Val Arg His Gly Ser Thr Ala Glu His
 2850 2855 2860
 Ala Glu His Ser Leu Gln Ala His Ala Gly Pro Thr Asp Leu Asp Val
 2865 2870 2875 2880
 Ala Met Phe His Arg Asp Ala Gly Ala Asp Ser Asp Ser Asp Ser Asp
 2885 2890 2895
 Leu Ser Leu Glu Glu Glu Arg Ser Leu Ser Ile Pro Ser Ser Glu Ser
 2900 2905 2910
 Glu Asp Asn Gly Arg Thr Arg Gly Arg Phe Gln Arg Pro Leu Arg Arg
 2915 2920 2925

Ala Ala Gln Ser Glu Arg Leu Leu Ala His Pro Lys Asp Val Asp Gly
 2930 2935 2940
 Asn Asp Leu Leu Ser Tyr Trp Pro Ala Leu Gly Glu Cys Glu Ala Ala
 2945 2950 2955 2960
 Pro Cys Ala Leu Gln Ala Trp Gly Ser Glu Arg Arg Leu Gly Leu Asp
 2965 2970 2975
 Ser Asn Lys Asp Ala Ala Asn Asn Asn Gln Pro Glu Leu Ala Leu Thr
 2980 2985 2990
 Ser Gly Asp Glu Thr Ser Leu Gly Arg Ala Gln Arg Gln Arg Lys Gly
 2995 3000 3005
 Ile Leu Lys Asn Arg Leu Gln Tyr Pro Leu Val Pro Gln Thr Arg Gly
 3010 3015 3020
 Thr Pro Glu Leu Ser Trp Cys Arg Ala Ala Thr Leu Gly His Arg Ala
 3025 3030 3035 3040
 Val Pro Ala Ala Ser Tyr Gly Arg Ile Tyr Ala Gly Gly Gly Thr Gly
 3045 3050 3055
 Ser Leu Ser Gln Pro Ala Ser Arg Tyr Ser Ser Arg Glu Gln Leu Asp
 3060 3065 3070
 Leu Leu Leu Arg Arg Gln Leu Ser Arg Glu Arg Leu Glu Glu Val Pro
 3075 3080 3085
 Val Pro Ala Pro Val Leu His Pro Leu Ser Arg Pro Gly Ser Gln Glu
 3090 3095 3100
 Arg Leu Asp Thr Ala Pro Ala Arg Leu Glu Pro Arg Asp Arg Gly Ser
 3105 3110 3115 3120
 Thr Leu Pro Arg Arg Gln Pro Pro Arg Asp Tyr Pro Gly Thr Met Ala
 3125 3130 3135
 Gly Arg Phe Gly Ser Arg Asp Ala Leu Asp Leu Gly Ala Pro Arg Glu
 3140 3145 3150
 Trp Leu Ser Thr Leu Pro Pro Pro Arg Arg Asn Arg Asp Leu Asp Pro
 3155 3160 3165
 Gln His Pro Pro Leu Pro Leu Ser Pro Gln Arg Pro Leu Ser Arg Asp
 3170 3175 3180
 Pro Leu Leu Pro Ser Arg Pro Leu Asp Ser Leu Ser Arg Ile Ser Asn
 3185 3190 3195 3200
 Ser Arg Glu Arg Leu Asp Gln Val Pro Ser Arg His Pro Ser Arg Glu
 3205 3210 3215
 Ala Leu Gly Pro Ala Pro Gln Leu Leu Arg Ala Arg Glu Asp Pro Ala
 3220 3225 3230

Ser Gly Pro Ser His Gly Pro Ser Thr Glu Gln Leu Asp Ile Leu Ser
3235 3240 3245

Ser Ile Leu Ala Ser Phe Asn Ser Ser Ala Leu Ser Ser Val Gln Ser
3250 3255 3260

Ser Ser Thr Pro Ser Gly Pro His Thr Thr Ala Thr Pro Ser Ala Thr
3265 3270 3275 3280

Ala Ser Ala Leu Gly Pro Ser Thr Pro Arg Ser Ala Thr Ser His Ser
3285 3290 3295

Ile Ser Glu Leu Ser Pro Asp Ser Glu Val Pro Arg Ser Glu Gly His
3300 3305 3310

Ser

<210> 70

<211> 2923

<212> PRT

<213> Homo sapiens

<400> 70

Met Arg Ser Pro Ala Thr Gly Val Pro Leu Pro Thr Pro Pro Pro Pro
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Leu Leu Leu Leu Leu Leu Leu Leu Pro Pro Pro Leu Leu Gly Asp
20 25 30

Gln Val Gly Pro Cys Arg Ser Leu Gly Ser Arg Gly Arg Gly Ser Ser
35 40 45

Gly Ala Cys Ala Pro Met Gly Trp Leu Cys Pro Ser Ser Ala Ser Asn
50 55 60

Leu Trp Leu Tyr Thr Ser Arg Cys Arg Asp Ala Gly Thr Glu Leu Thr
65 70 75 80

Gly His Leu Val Pro His His Asp Gly Leu Arg Val Trp Cys Pro Glu
85 90 95

Ser Glu Ala His Ile Pro Leu Pro Pro Ala Pro Glu Gly Cys Pro Trp
100 105 110

Ser Cys Arg Leu Leu Gly Ile Gly Gly His Leu Ser Pro Gln Gly Lys
115 120 125

Leu Thr Leu Pro Glu Glu His Pro Cys Leu Lys Ala Pro Arg Leu Arg
130 135 140

Cys Gln Ser Cys Lys Leu Ala Gln Ala Pro Gly Leu Arg Ala Gly Glu
145 150 155 160

Arg Ser Ile Glu Glu Ser Leu Gly Gly Arg Arg Lys Arg Asn Val Asn

165										170					175				
Thr	Ala	Pro	Gln	Phe	Gln	Pro	Pro	Ser	Tyr	Gln	Ala	Thr	Val	Pro	Glu				
			180					185					190						
Asn	Gln	Pro	Ala	Gly	Thr	Pro	Val	Ala	Ser	Leu	Arg	Ala	Ile	Asp	Pro				
			195					200					205						
Asp	Glu	Gly	Glu	Ala	Gly	Arg	Leu	Glu	Tyr	Thr	Met	Asp	Ala	Leu	Phe				
			210					215					220						
Asp	Ser	Arg	Ser	Asn	Gln	Phe	Phe	Ser	Leu	Asp	Pro	Val	Thr	Gly	Ala				
			225					230					235						
Val	Thr	Thr	Ala	Glu	Glu	Leu	Asp	Arg	Glu	Thr	Lys	Ser	Thr	His	Val				
			245					250					255						
Phe	Arg	Val	Thr	Ala	Gln	Asp	His	Gly	Met	Pro	Arg	Arg	Ser	Ala	Leu				
			260					265					270						
Ala	Thr	Leu	Thr	Ile	Leu	Val	Thr	Asp	Thr	Asn	Asp	His	Asp	Pro	Val				
			275					280					285						
Phe	Glu	Gln	Gln	Glu	Tyr	Lys	Glu	Ser	Leu	Arg	Glu	Asn	Leu	Glu	Val				
			290					295					300						
Gly	Tyr	Glu	Val	Leu	Thr	Val	Arg	Ala	Thr	Asp	Gly	Asp	Ala	Pro	Pro				
			305					310					315						
Asn	Ala	Asn	Ile	Leu	Tyr	Arg	Leu	Leu	Glu	Gly	Ser	Gly	Gly	Ser	Pro				
			325					330					335						
Ser	Glu	Val	Phe	Glu	Ile	Asp	Pro	Arg	Ser	Gly	Val	Ile	Arg	Thr	Arg				
			340					345					350						
Gly	Pro	Val	Asp	Arg	Glu	Glu	Val	Glu	Ser	Tyr	Gln	Leu	Thr	Val	Glu				
			355					360					365						
Ala	Ser	Asp	Gln	Gly	Arg	Asp	Pro	Gly	Pro	Arg	Ser	Thr	Thr	Ala	Ala				
			370					375					380						
Val	Phe	Leu	Ser	Val	Glu	Asp	Asp	Asn	Asp	Asn	Ala	Pro	Gln	Phe	Ser				
			385					390					395						
Glu	Lys	Arg	Tyr	Val	Val	Gln	Val	Arg	Glu	Asp	Val	Thr	Pro	Gly	Ala				
			405					410					415						
Pro	Val	Leu	Arg	Val	Thr	Ala	Ser	Asp	Arg	Asp	Lys	Gly	Ser	Asn	Ala				
			420					425					430						
Val	Val	His	Tyr	Ser	Ile	Met	Ser	Gly	Asn	Ala	Arg	Gly	Gln	Phe	Tyr				
			435					440					445						
Leu	Asp	Ala	Gln	Thr	Gly	Ala	Leu	Asp	Val	Val	Ser	Pro	Leu	Asp	Tyr				
			450					455					460						
Glu	Thr	Thr	Lys	Glu	Tyr	Thr	Leu	Arg	Val	Arg	Ala	Gln	Asp	Gly	Gly				

465	470	475	480
Arg Pro Pro Leu Ser Asn Val Ser Gly Leu Val Thr Val Gln Val Leu			
485	490	495	
Asp Ile Asn Asp Asn Ala Pro Ile Phe Val Ser Thr Pro Phe Gln Ala			
500	505	510	
Thr Val Leu Glu Ser Val Pro Leu Gly Tyr Leu Val Leu His Val Gln			
515	520	525	
Ala Ile Asp Ala Asp Ala Gly Asp Asn Ala Arg Leu Glu Tyr Arg Leu			
530	535	540	
Ala Gly Val Gly His Asp Phe Pro Phe Thr Ile Asn Asn Gly Thr Gly			
545	550	555	560
Trp Ile Ser Val Ala Ala Glu Leu Asp Arg Glu Glu Val Asp Phe Tyr			
565	570	575	
Ser Phe Gly Val Glu Ala Arg Asp His Gly Thr Pro Ala Leu Thr Ala			
580	585	590	
Ser Ala Ser Val Ser Val Thr Val Leu Asp Val Asn Asp Asn Asn Pro			
595	600	605	
Ihr Phe Thr Gln Pro Glu Tyr Thr Val Arg Leu Asn Glu Asp Ala Ala			
610	615	620	
Val Gly Thr Ser Val Val Thr Val Ser Ala Val Asp Arg Asp Ala His			
625	630	635	640
Ser Val Ile Thr Tyr Gln Ile Thr Ser Gly Asn Thr Arg Asn Arg Phe			
645	650	655	
Ser Ile Thr Ser Gln Ser Gly Gly Gly Leu Val Ser Leu Ala Leu Pro			
660	665	670	
Leu Asp Tyr Lys Leu Glu Arg Gln Tyr Val Leu Ala Val Thr Ala Ser			
675	680	685	
Asp Gly Thr Arg Gln Asp Thr Ala Gln Ile Val Val Asn Val Thr Asp			
690	695	700	
Ala Asn Thr His Arg Pro Val Phe Gln Ser Ser His Tyr Thr Val Asn			
705	710	715	720
Val Asn Glu Asp Arg Pro Ala Gly Thr Thr Val Val Leu Ile Ser Ala			
725	730	735	
Thr Asp Glu Asp Thr Gly Glu Asn Ala Arg Ile Thr Tyr Phe Met Glu			
740	745	750	
Asp Ser Ile Pro Gln Phe Arg Ile Asp Ala Asp Thr Gly Ala Val Thr			
755	760	765	
Ihr Gln Ala Glu Leu Asp Tyr Glu Asp Gln Val Ser Tyr Thr Leu Ala			

770										775										780									
Ile Thr Ala Arg Asp Asn Gly	Ile Pro Gln Lys Ser Asp Thr Thr Tyr																												
785					790					795									800										
Leu Glu Ile Leu Val Asn Asp Val Asn Asp Asn Ala Pro Gln Phe Leu																													
				805						810									815										
Arg Asp Ser Tyr Gln Gly Ser Val Tyr Glu Asp Val Pro Pro Phe Thr																													
				820						825									830										
Ser Val Leu Gln Ile Ser Ala Thr Asp Arg Asp Ser Gly Leu Asn Gly																													
				835						840									845										
Arg Val Phe Tyr Thr Phe Gln Gly Gly Asp Asp Gly Asp Gly Asp Phe																													
				850						855									860										
Ile Val Glu Ser Thr Ser Gly Ile Val Arg Thr Leu Arg Arg Leu Asp																													
				865						870									880										
Arg Glu Asn Val Ala Gln Tyr Val Leu Arg Ala Tyr Ala Val Asp Lys																													
				885						890									895										
Gly Met Pro Pro Ala Arg Thr Pro Met Glu Val Thr Val Thr Val Leu																													
				900						905									910										
Asp Val Asn Asp Asn Pro Pro Val Phe Glu Gln Asp Glu Phe Asp Val																													
				915						920									925										
Phe Val Glu Glu Asn Ser Pro Ile Gly Leu Ala Val Ala Arg Val Thr																													
				930						935									940										
Ala Thr Asp Pro Asp Glu Gly Thr Asn Ala Gln Ile Met Tyr Gln Ile																													
				945						950									960										
Val Glu Gly Asn Ile Pro Glu Val Phe Gln Leu Asp Ile Phe Ser Gly																													
				965						970									975										
Glu Leu Thr Ala Leu Val Asp Leu Asp Tyr Glu Asp Arg Pro Glu Tyr																													
				980						985									990										
Val Leu Val Ile Gln Ala Thr Ser Ala Pro Leu Val Ser Arg Ala Thr																													
				995						1000									1005										
Val His Val Arg Leu Leu Asp Arg Asn Asp Asn Pro Pro Val Leu Gly																													
				1010						1015									1020										
Asn Phe Glu Ile Leu Phe Asn Asn Tyr Val Thr Asn Arg Ser Ser Ser																													
				1025						1030									1035										
Phe Pro Gly Gly Ala Ile Gly Arg Val Pro Ala His Asp Pro Asp Ile																													
				1045						1050									1055										
Ser Asp Ser Leu Thr Tyr Ser Phe Glu Arg Gly Asn Glu Leu Ser Leu																													
				1060						1065									1070										
Val Leu Val Asn Ala Ser Thr Gly Glu Leu Lys Leu Ser Arg Ala Leu																													

1075	1080	1085
Asp Asn Asn Arg Pro Leu Glu Ala Ile Met Ser Val Leu Val Ser Asp 1090 1095 1100		
Gly Val His Ser Val Thr Ala Gln Cys Ala Leu Arg Val Thr Ile Ile 1105 1110 1115 1120		
Thr Asp Glu Met Leu Thr His Ser Ile Thr Leu Arg Leu Glu Asp Met 1125 1130 1135		
Ser Pro Glu Arg Phe Leu Ser Pro Leu Leu Gly Leu Phe Ile Gln Ala 1140 1145 1150		
Val Ala Ala Thr Leu Ala Thr Pro Pro Asp His Val Val Val Phe Asn 1155 1160 1165		
Val Gln Arg Asp Thr Asp Ala Pro Gly Gly His Ile Leu Asn Val Ser 1170 1175 1180		
Leu Ser Val Gly Gln Pro Pro Gly Pro Gly Gly Gly Pro Pro Phe Leu 1185 1190 1195 1200		
Pro Ser Glu Asp Leu Gln Glu Arg Leu Tyr Leu Asn Arg Ser Leu Leu 1205 1210 1215		
Thr Ala Ile Ser Ala Gln Arg Val Leu Pro Phe Asp Asp Asn Ile Cys 1220 1225 1230		
Leu Arg Glu Pro Cys Glu Asn Tyr Met Arg Cys Val Ser Val Leu Arg 1235 1240 1245		
Phe Asp Ser Ser Ala Pro Phe Ile Ala Ser Ser Ser Val Leu Phe Arg 1250 1255 1260		
Pro Ile His Pro Val Gly Gly Leu Arg Cys Arg Cys Pro Pro Gly Phe 1265 1270 1275 1280		
Thr Gly Asp Tyr Cys Glu Thr Glu Val Asp Leu Cys Tyr Ser Arg Pro 1285 1290 1295		
Cys Gly Pro His Gly Arg Cys Arg Ser Arg Glu Gly Gly Tyr Thr Cys 1300 1305 1310		
Leu Cys Arg Asp Gly Tyr Thr Gly Glu His Cys Glu Val Ser Ala Arg 1315 1320 1325		
Ser Gly Arg Cys Thr Pro Gly Val Cys Lys Asn Gly Gly Thr Cys Val 1330 1335 1340		
Asn Leu Leu Val Gly Gly Phe Lys Cys Asp Cys Pro Ser Gly Asp Phe 1345 1350 1355 1360		
Glu Lys Pro Tyr Cys Gln Val Thr Thr Arg Ser Phe Pro Ala His Ser 1365 1370 1375		
Phe Ile Thr Phe Arg Gly Leu Arg Gln Arg Phe His Phe Thr Leu Ala		

1380	1385	1390
Leu Ser Phe Ala Thr Lys Glu Arg Asp Gly Leu Leu Leu Tyr Asn Gly 1395 1400 1405		
Arg Phe Asn Glu Lys His Asp Phe Val Ala Leu Glu Val Ile Gln Glu 1410 1415 1420		
Gln Val Gln Leu Thr Phe Ser Ala Gly Glu Ser Thr Thr Thr Val Ser 1425 1430 1435 1440		
Pro Phe Val Pro Gly Gly Val Ser Asp Gly Gln Trp His Thr Val Gln 1445 1450 1455		
Leu Lys Tyr Tyr Asn Lys Pro Leu Leu Gly Gln Thr Gly Leu Pro Gln 1460 1465 1470		
Gly Pro Ser Glu Gln Lys Val Ala Val Val Thr Val Asp Gly Cys Asp 1475 1480 1485		
Thr Gly Val Ala Leu Arg Phe Gly Ser Val Leu Gly Asn Tyr Ser Cys 1490 1495 1500		
Ala Ala Gln Gly Thr Gln Gly Gly Ser Lys Lys Ser Leu Asp Leu Thr 1505 1510 1515 1520		
Gly Pro Leu Leu Leu Gly Gly Val Pro Asp Leu Pro Glu Ser Phe Pro 1525 1530 1535		
Val Arg Met Arg Gln Phe Val Gly Cys Met Arg Asn Leu Gln Val Asp 1540 1545 1550		
Ser Arg His Ile Asp Met Ala Asp Phe Ile Ala Asn Asn Gly Thr Val 1555 1560 1565		
Pro Gly Cys Pro Ala Lys Lys Asn Val Cys Asp Ser Asn Thr Cys His 1570 1575 1580		
Asn Gly Gly Thr Cys Val Asn Gln Tip Asp Ala Phe Ser Cys Glu Cys 1585 1590 1595 1600		
Pro Leu Gly Phe Gly Gly Lys Ser Cys Ala Gln Glu Met Ala Asn Pro 1605 1610 1615		
Gln His Phe Leu Gly Ser Ser Leu Val Ala Trp His Gly Leu Ser Leu 1620 1625 1630		
Pro Ile Ser Gln Pro Trp Tyr Leu Ser Leu Met Phe Arg Thr Arg Gln 1635 1640 1645		
Ala Asp Gly Val Leu Leu Gln Ala Ile Thr Arg Gly Arg Ser Thr Ile 1650 1655 1660		
Thr Leu Gln Leu Arg Glu Gly His Val Met Leu Ser Val Glu Gly Thr 1665 1670 1675 1680		
Gly Leu Gln Ala Ser Ser Leu Arg Leu Glu Pro Gly Arg Ala Asn Asp		

1685	1690	1695
Gly Asp Trp His His Ala Gln Leu Ala Leu Gly Ala Ser Gly Gly Pro 1700 1705 1710		
Gly His Ala Ile Leu Ser Phe Asp Tyr Gly Gln Gln Arg Ala Glu Gly 1715 1720 1725		
Asn Leu Gly Pro Arg Leu His Gly Leu His Leu Ser Asn Ile Thr Val 1730 1735 1740		
Gly Gly Ile Pro Gly Pro Ala Gly Gly Val Ala Arg Gly Phe Arg Gly 1745 1750 1755 1760		
Cys Leu Gln Gly Val Arg Val Ser Asp Thr Pro Glu Gly Val Asn Ser 1765 1770 1775		
Leu Asp Pro Ser His Gly Glu Ser Ile Asn Val Glu Gln Gly Cys Ser 1780 1785 1790		
Leu Pro Asp Pro Cys Asp Ser Asn Pro Cys Pro Ala Asn Ser Tyr Cys 1795 1800 1805		
Ser Asn Asp Trp Asp Ser Tyr Ser Cys Ser Cys Asp Pro Gly Tyr Tyr 1810 1815 1820		
Gly Asp Asn Cys Thr Asn Val Cys Asp Leu Asn Pro Cys Glu His Gln 1825 1830 1835 1840		
Ser Val Cys Thr Arg Lys Pro Ser Ala Pro His Gly Tyr Thr Cys Glu 1845 1850 1855		
Cys Pro Pro Asn Tyr Leu Gly Pro Tyr Cys Glu Thr Arg Ile Asp Gln 1860 1865 1870		
Pro Cys Pro Arg Gly Trp Trp Gly His Pro Thr Cys Gly Pro Cys Asn 1875 1880 1885		
Cys Asp Val Ser Lys Gly Phe Asp Pro Asp Cys Asn Lys Thr Ser Gly 1890 1895 1900		
Glu Cys His Cys Lys Glu Asn His Tyr Arg Pro Pro Gly Ser Pro Thr 1905 1910 1915 1920		
Cys Leu Leu Cys Asp Cys Tyr Pro Thr Gly Ser Leu Ser Arg Val Cys 1925 1930 1935		
Asp Pro Glu Asp Gly Gln Cys Pro Cys Lys Pro Gly Val Ile Gly Arg 1940 1945 1950		
Gln Cys Asp Arg Cys Asp Asn Pro Phe Ala Glu Val Thr Thr Asn Gly 1955 1960 1965		
Cys Glu Val Asn Tyr Asp Ser Cys Pro Arg Ala Ile Glu Ala Gly Ile 1970 1975 1980		
Trp Trp Pro Arg Thr Arg Phe Gly Leu Pro Ala Ala Ala Pro Cys Pro		

1985	1990	1995	2000
Lys Gly Ser Phe Gly Thr Ala Val Arg His Cys Asp Glu His Arg Gly	2005	2010	2015
Trp Leu Pro Pro Asn Leu Phe Asn Cys Thr Ser Ile Thr Phe Ser Glu	2020	2025	2030
Leu Lys Gly Phe Ala Glu Arg Leu Gln Arg Asn Glu Ser Gly Leu Asp	2035	2040	2045
Ser Gly Arg Ser Gln Gln Leu Ala Leu Leu Leu Arg Asn Ala Thr Gln	2050	2055	2060
His Thr Ala Gly Tyr Phe Gly Ser Asp Val Lys Val Ala Tyr Gln Leu	2065	2070	2075
Ala Thr Arg Leu Leu Ala His Glu Ser Thr Gln Arg Gly Phe Gly Leu	2085	2090	2095
Ser Ala Thr Gln Asp Val His Phe Thr Glu Asn Leu Leu Arg Val Gly	2100	2105	2110
Ser Ala Leu Leu Asp Thr Ala Asn Lys Arg His Trp Glu Leu Ile Gln	2115	2120	2125
Gln Thr Glu Gly Gly Thr Ala Trp Leu Leu Gln His Tyr Glu Ala Tyr	2130	2135	2140
Ala Ser Ala Leu Ala Gln Asn Met Arg His Thr Tyr Leu Ser Pro Phe	2145	2150	2155
Thr Ile Val Thr Pro Asn Ile Val Ile Ser Val Val Arg Leu Asp Lys	2165	2170	2175
Gly Asn Phe Ala Gly Ala Lys Leu Pro Arg Tyr Glu Ala Leu Arg Gly	2180	2185	2190
Glu Gln Pro Pro Asp Leu Glu Thr Thr Val Ile Leu Pro Glu Ser Val	2195	2200	2205
Phe Arg Glu Thr Pro Pro Val Val Arg Pro Ala Gly Pro Gly Glu Ala	2210	2215	2220
Gln Glu Pro Glu Glu Leu Ala Arg Arg Gln Arg Arg His Pro Glu Leu	2225	2230	2235
Ser Gln Gly Glu Ala Val Ala Ser Val Ile Ile Tyr Arg Thr Leu Ala	2245	2250	2255
Gly Leu Leu Pro His Asn Tyr Asp Pro Asp Lys Arg Ser Leu Arg Val	2260	2265	2270
Pro Lys Arg Pro Ile Ile Asn Thr Pro Val Val Ser Ile Ser Val His	2275	2280	2285
Arg Asp Glu Glu Leu Leu Pro Arg Ala Leu Asp Lys Pro Val Thr Val			

2290

2295

2300

Gln Phe Arg Leu Leu Glu Thr Glu Glu Arg Thr Lys Pro Ile Cys Val
 2305 2310 2315 2320

Phe Thr Asn His Ser Ile Leu Val Ser Gly Thr Gly Gly Trp Ser Ala
 2325 2330 2335

Arg Gly Cys Glu Val Val Phe Arg Asn Glu Ser His Val Ser Cys Gln
 2340 2345 2350

Cys Asn His Met Thr Ser Phe Ala Val Leu Met Asp Val Ser Arg Arg
 2355 2360 2365

Glu Asn Gly Glu Ile Leu Pro Leu Lys Thr Leu Thr Tyr Val Ala Leu
 2370 2375 2380

Gly Val Thr Leu Ala Ala Leu Leu Leu Thr Phe Phe Phe Leu Thr Leu
 2385 2390 2395 2400

Leu Arg Ile Leu Arg Ser Asn Gln His Gly Ile Arg Arg Asn Leu Thr
 2405 2410 2415

Ala Ala Leu Gly Leu Ala Gln Leu Val Phe Leu Leu Gly Ile Asn Gln
 2420 2425 2430

Ala Asp Leu Pro Phe Ala Cys Thr Val Ile Ala Ile Leu Leu His Phe
 2435 2440 2445

Leu Tyr Leu Cys Thr Phe Ser Trp Ala Leu Leu Glu Ala Leu His Leu
 2450 2455 2460

Tyr Arg Ala Leu Thr Glu Val Arg Asp Val Asn Thr Gly Pro Met Arg
 2465 2470 2475 2480

Phe Tyr Tyr Met Leu Gly Trp Gly Val Pro Ala Phe Ile Thr Gly Leu
 2485 2490 2495

Ala Val Gly Leu Asp Pro Glu Gly Tyr Gly Asn Pro Asp Phe Cys Tip
 2500 2505 2510

Leu Ser Ile Tyr Asp Thr Leu Ile Trp Ser Phe Ala Gly Pro Val Ala
 2515 2520 2525

Phe Ala Val Ser Met Ser Val Phe Leu Tyr Ile Leu Ala Ala Arg Ala
 2530 2535 2540

Ser Cys Ala Ala Gln Arg Gln Gly Phe Glu Lys Lys Gly Pro Val Ser
 2545 2550 2555 2560

Gly Leu Gln Pro Ser Phe Ala Val Leu Leu Leu Ser Ala Thr Trp
 2565 2570 2575

Leu Leu Ala Leu Leu Ser Val Asn Ser Asp Thr Leu Leu Phe His Tyr
 2580 2585 2590

Leu Phe Ala Thr Cys Asn Cys Ile Gln Gly Pro Phe Ile Phe Leu Ser

2595	2600	2605
Tyr Val Val Leu Ser Lys Glu Val Arg Lys Ala Leu Lys Leu Ala Cys 2610 2615 2620		
Ser Arg Lys Pro Ser Pro Asp Pro Ala Leu Thr Thr Lys Ser Thr Leu 2625 2630 2635 2640		
Thr Ser Ser Tyr Asn Cys Pro Ser Pro Tyr Ala Asp Gly Arg Leu Tyr 2645 2650 2655		
Gln Pro Tyr Gly Asp Ser Ala Gly Ser Leu His Ser Thr Ser Arg Ser 2660 2665 2670		
Gly Lys Ser Gln Pro Ser Tyr Ile Pro Phe Leu Leu Arg Glu Glu Ser 2675 2680 2685		
Ala Leu Asn Pro Gly Gln Gly Pro Pro Gly Leu Gly Asp Pro Gly Ser 2690 2695 2700		
Leu Phe Leu Glu Gly Gln Asp Gln Gln His Asp Pro Asp Thr Asp Ser 2705 2710 2715 2720		
Asp Ser Asp Leu Ser Leu Glu Asp Asp Gln Ser Gly Ser Tyr Ala Ser 2725 2730 2735		
Thr His Ser Ser Asp Ser Glu Glu Glu Glu Glu Glu Glu Glu Glu 2740 2745 2750		
Ala Ala Phe Pro Gly Glu Gln Gly Trp Asp Ser Leu Leu Gly Pro Gly 2755 2760 2765		
Ala Glu Arg Leu Pro Leu His Ser Thr Pro Lys Asp Gly Gly Pro Gly 2770 2775 2780		
Pro Gly Lys Ala Pro Trp Pro Gly Asp Phe Gly Thr Thr Ala Lys Glu 2785 2790 2795 2800		
Ser Ser Gly Asn Gly Ala Pro Glu Glu Arg Leu Arg Glu Asn Gly Asp 2805 2810 2815		
Ala Leu Ser Arg Glu Gly Ser Leu Gly Pro Leu Pro Gly Ser Ser Ala 2820 2825 2830		
Gln Pro His Lys Gly Ile Leu Lys Lys Lys Cys Leu Pro Thr Ile Ser 2835 2840 2845		
Glu Lys Ser Ser Leu Leu Arg Leu Pro Leu Glu Gln Cys Thr Gly Ser 2850 2855 2860		
Ser Arg Gly Ser Ser Ala Ser Glu Gly Ser Arg Gly Gly Pro Pro Pro 2865 2870 2875 2880		
Arg Pro Pro Pro Arg Gln Ser Leu Gln Glu Gln Leu Asn Gly Val Met 2885 2890 2895		
Pro Ile Ala Met Ser Ile Lys Ala Gly Thr Val Asp Glu Asp Ser Ser		

2900

2905

2910

Gly Ser Glu Phe Leu Phe Phe Asn Phe Leu His
 2915 2920

<210> 71

<211> 2920

<212> PRT

<213> Mus musculus

<400> 71

Met Arg Thr Arg Ala Ala Ser Ala Pro Leu Pro Thr Pro Leu Leu Pro
 1 5 10 15

Leu Leu Leu Leu Leu Leu Leu Leu Pro Pro Ser Pro Leu Leu Gly Asp
 20 25 30

Gln Val Gly Pro Cys Arg Ser Leu Gly Ser Gly Gly Arg Ser Ser Ser
 35 40 45

Gly Ala Cys Ala Pro Val Gly Trp Leu Cys Pro Ala Ser Ala Ser Asn
 50 55 60

Leu Trp Leu Tyr Thr Ser Arg Cys Arg Glu Ser Gly Ile Glu Leu Thr
 65 70 75 80

Gly His Leu Val Pro His His Asp Gly Leu Arg Val Trp Cys Pro Glu
 85 90 95

Ser Gly Ala His Ile Pro Leu Pro Pro Ser Ser Glu Gly Cys Pro Trp
 100 105 110

Ser Cys Arg Leu Leu Gly Ile Gly Gly His Leu Ser Pro Gln Gly Thr
 115 120 125

Leu Thr Leu Pro Glu Glu His Pro Cys Leu Lys Ala Pro Arg Leu Arg
 130 135 140

Cys Gln Ser Cys Lys Leu Ala Gln Ala Pro Gly Leu Arg Ala Gly Glu
 145 150 155 160

Gly Ser Pro Glu Glu Ser Leu Gly Gly Arg Arg Lys Arg Asn Val Asn
 165 170 175

Thr Ala Pro Gln Phe Gln Pro Pro Ser Tyr Gln Ala Thr Val Pro Glu
 180 185 190

Asn Gln Pro Ala Gly Thr Ser Val Ala Ser Leu Arg Ala Ile Asp Pro
 195 200 205

Asp Glu Gly Glu Ala Gly Arg Leu Glu Tyr Thr Met Asp Ala Leu Phe
 210 215 220

Asp Ser Arg Ser Asn His Phe Phe Ser Leu Asp Pro Ile Thr Gly Val
 225 230 235 240

Val Thr Thr Ala Glu Glu Leu Asp Arg Glu Thr Lys Ser Thr His Val
 245 250 255
 Phe Arg Val Thr Ala Gln Asp His Gly Met Pro Arg Arg Ser Ala Leu
 260 265 270
 Ala Thr Leu Thr Ile Leu Val Thr Asp Thr Asn Asp His Asp Pro Val
 275 280 285
 Phe Glu Gln Gln Glu Tyr Lys Glu Ser Leu Arg Glu Asn Leu Glu Val
 290 295 300
 Gly Tyr Glu Val Leu Thr Val Arg Ala Thr Asp Gly Asp Ala Pro Pro
 305 310 315 320
 Asn Ala Asn Ile Leu Tyr Arg Leu Leu Glu Gly Ala Gly Asp Ser Pro
 325 330 335
 Ser Asp Ala Phe Glu Ile Asp Pro Arg Ser Gly Val Ile Arg Thr Arg
 340 345 350
 Gly Pro Val Asp Arg Glu Glu Val Glu Ser Tyr Lys Leu Thr Val Glu
 355 360 365
 Ala Ser Asp Gln Gly Arg Asp Pro Gly Pro Arg Ser Ser Thr Ala Ile
 370 375 380
 Val Phe Leu Ser Val Glu Asp Asp Asn Asp Asn Ala Pro Gln Phe Ser
 385 390 395 400
 Glu Lys Arg Tyr Val Val Gln Val Arg Glu Asp Val Thr Pro Gly Ala
 405 410 415
 Pro Val Leu Arg Val Thr Ala Ser Asp Arg Asp Lys Gly Ser Asn Ala
 420 425 430
 Leu Val His Tyr Ser Ile Met Ser Gly Asn Ala Arg Gly Gln Phe Tyr
 435 440 445
 Leu Asp Ala Gln Thr Gly Ala Leu Asp Val Val Ser Pro Leu Asp Tyr
 450 455 460
 Glu Thr Thr Lys Glu Tyr Thr Leu Arg Ile Arg Ala Gln Asp Gly Gly
 465 470 475 480
 Arg Pro Pro Leu Ser Asn Val Ser Gly Leu Val Thr Val Gln Val Leu
 485 490 495
 Asp Ile Asn Asp Ile Arg Pro Pro Ile Phe Val Ser Thr Pro Phe Gln
 500 505 510
 Ala Thr Val Leu Glu Ser Val Pro Leu Gly Tyr Leu Val Leu His Val
 515 520 525
 Gln Ala Ile Asp Ala Asp Ala Gly Asp Asn Ala Arg Leu Glu Tyr Ser
 530 535 540

Leu Ala Gly Val Gly His Asp Phe Pro Phe Thr Ile Asn Asn Gly Thr
 545 550 555 560
 Gly Trp Ile Ser Val Ala Ala Glu Leu Asp Arg Glu Glu Val Asp Phe
 565 570 575
 Tyr Ser Phe Gly Val Glu Ala Arg Asp His Gly Thr Pro Ala Leu Thr
 580 585 590
 Ala Ser Ala Ser Val Ser Val Thr Ile Leu Asp Val Asn Asp Asn Asn
 595 600 605
 Pro Thr Phe Thr Gln Pro Glu Tyr Thr Val Arg Leu Asn Glu Asp Ala
 610 615 620
 Ala Val Gly Thr Ser Val Val Thr Val Ser Ala Val Asp Arg His Ala
 625 630 635 640
 His Ser Val Ile Thr Tyr Gln Ile Thr Ser Gly Asn Thr Arg Asn Arg
 645 650 655
 Phe Ser Ile Thr Ser Gln Ser Gly Gly Gly Leu Val Ser Leu Ala Leu
 660 665 670
 Pro Leu Asp Tyr Lys Leu Glu Arg Gln Tyr Val Leu Ala Val Thr Ala
 675 680 685
 Ser Asp Gly Thr Arg Gln Asp Thr Ala Gln Ile Val Val Asn Val Thr
 690 695 700
 Asp Ala Asn Thr His Arg Pro Val Phe Gln Ser Ser His Tyr Thr Val
 705 710 715 720
 Asn Gly Asn Glu Asp Arg Pro Ala Gly Thr Thr Val Val Leu Ile Ser
 725 730 735
 Ala Thr Asp Glu Asp Thr Gly Glu Asn Ala Arg Ile Thr Tyr Phe Met
 740 745 750
 Glu Asp Ser Ile Pro Gln Phe Arg Ile Asp Gly Asp Thr Gly Ala Val
 755 760 765
 Thr Thr Gln Ala Glu Leu Asp Tyr Glu Asp Gln Val Ser Tyr Thr Leu
 770 775 780
 Ala Ile Thr Ala Arg Asp Asn Gly Ile Pro Gln Lys Ser Asp Thr Thr
 785 790 795 800
 Tyr Leu Glu Ile Leu Val Asn Asp Val Asn Asp Asn Ala Pro Gln Phe
 805 810 815
 Leu Arg Asp Ser Tyr Gln Gly Thr Val Tyr Glu Asp Val Pro Pro Phe
 820 825 830
 Thr Ser Val Leu Gln Ile Leu Ala Thr Asp Arg Asp Ser Gly Leu Asn
 835 840 845

Gly Arg Val Phe Tyr Thr Phe Gln Gly Gly Asp Asp Gly Asp Gly Asp
 850 855 860

Phe Ile Val Glu Ser Thr Ser Gly Ile Val Arg Thr Leu Arg Arg Leu
 865 870 875 880

Asp Arg Glu Asn Val Ala Gln Tyr Val Leu Arg Ala Tyr Ala Val Asp
 885 890 895

Lys Glv Met Pro Pro Ala Arg Thr Pro Met Glu Val Thr Val Thr Val
 900 905 910

Leu Asp Gly Asn Asp Asn Pro Pro Val Phe Glu Gln Asp Glu Phe Asp
 915 920 925

Val Phe Val Glu Glu Asn Ser Pro Ile Gly Leu Ala Val Ala Arg Val
 930 935 940

Thr Ala Thr Asp Pro Asp Glu Gly Thr Asn Ala Gln Ile Met Tyr Gln
 945 950 955 960

Ile Val Glu Gly Asn Ile Pro Glu Val Phe Gln Leu Asp Ile Phe Ser
 965 970 975

Gly Glu Leu Thr Ala Leu Val Asp Leu Asp Tyr Glu Asp Arg Pro Glu
 980 985 990

Tyr Val Leu Val Ile Gln Ala Thr Ser Ala Pro Leu Val Ser Arg Ala
 995 1000 1005

Thr Val His Val Arg Leu Leu Asp Arg Asn Asp Asn Pro Pro Val Leu
 1010 1015 1020

Gly Asn Phe Glu Ile Leu Phe Asn Asn Tyr Val Thr Asn Arg Ser Ser
 1025 1030 1035 1040

Ser Phe Pro Gly Gly Ala Ile Gly Arg Val Pro Ala His Asp Pro Asp
 1045 1050 1055

Ile Ser Asp Ser Leu Thr Tyr Ser Phe Glu Arg Gly Asn Glu Leu Ser
 1060 1065 1070

Leu Val Leu Leu Asn Ala Ser Thr Gly Glu Leu Arg Leu Ser Arg Ala
 1075 1080 1085

Leu Asp Asn Asn Arg Pro Leu Glu Ala Ile Met Ser Val Leu Val Ser
 1090 1095 1100

Asp Gly Val His Ser Val Thr Ala Gln Cys Ser Leu Arg Val Thr Ile
 1105 1110 1115 1120

Ile Thr Asp Glu Met Leu Thr His Ser Ile Thr Leu Arg Leu Glu Asp
 1125 1130 1135

Met Ser Pro Glu Arg Phe Leu Ser Pro Leu Leu Gly Leu Phe Ile Gln
 1140 1145 1150

Ala Val Ala Ala Thr Leu Ala Thr Pro Pro Asp His Val Val Val Phe
 1155 1160 1165
 Asn Val Gln Arg Asp Thr Asp Ala Pro Gly Gly His Ile Leu Asn Val
 1170 1175 1180
 Ser Leu Ser Val Gly Gln Pro Pro Gly Pro Gly Gly Gly Pro Pro Phe
 1185 1190 1195 1200
 Leu Pro Ser Glu Asp Leu Gln Glu Arg Leu Tyr Leu Asn Arg Ser Leu
 1205 1210 1215
 Leu Thr Ala Ile Ser Ala Lys Arg Val Leu Pro Phe Asp Arg Gln His
 1220 1225 1230
 Leu Leu Arg Glu Pro Cys Glu Asn Tyr Met Arg Cys Val Ser Val Leu
 1235 1240 1245
 Arg Phe Asp Ser Ser Ala Pro Phe Ile Ala Ser Ser Ser Val Leu Phe
 1250 1255 1260
 Arg Pro Ile His Leu Val Gly Gly Leu Arg Cys Arg Cys Pro Pro Gly
 1265 1270 1275 1280
 Leu Thr Gly Asp Tyr Cys Glu Thr Glu Val Asp Leu Cys Tyr Ser Arg
 1285 1290 1295
 Thr Cys Gly Pro His Gly Arg Cys Arg Ser Arg Glu Gly Gly Tyr Thr
 1300 1305 1310
 Cys Leu Cys Arg Gly Cys Tyr Thr Gly Glu His Cys Glu Ala Ser Thr
 1315 1320 1325
 His Ser Gly Arg Cys Thr Pro Gly Val Cys Lys Asn Gly Gly Thr Cys
 1330 1335 1340
 Val Asn Leu Leu Val Gly Gly Ile Lys Cys Asp Cys Pro Ser Gly His
 1345 1350 1355 1360
 Phe Glu Lys Pro Phe Cys Gln Val Thr Thr Arg Ser Phe Pro Ala Arg
 1365 1370 1375
 Pro Phe Ile Thr Phe Arg Gly Leu His Gln Arg Phe His Phe Thr Leu
 1380 1385 1390
 Ala Leu Ser Phe Ala Thr Lys Glu Arg Asn Gly Leu Leu Tyr Asn
 1395 1400 1405
 Gly Arg Phe Asn Glu Lys His Asp Phe Val Ala Leu Glu Val Ile Gln
 1410 1415 1420
 Glu Gln Val Gln Leu Thr Phe Ser Ala Gly Glu Ser Thr Thr Thr Val
 1425 1430 1435 1440
 Ser Pro Phe Val Pro Gly Gly Val Ser Asp Gly Gln Trp His Thr Val
 1445 1450 1455

Gln Leu Lys Tyr Tyr Asn Lys Pro Leu Leu Gly Gln Thr Gly Leu Pro
 1460 1465 1470
 Gln Gly Pro Ser Glu Gln Lys Val Ala Val Val Ser Val Asp Gly Cys
 1475 1480 1485
 Asp Thr Gly Val Ala Leu Arg Phe Gly Ala Met Leu Gly Asn Tyr Ser
 1490 1495 1500
 Cys Ala Ala Gln Glv Thr Gln Glv Glv Ser Lys Lys Ser Leu Asp Leu
 1505 1510 1515 1520
 Thr Gly Pro Leu Leu Leu Gly Gly Val Pro Asp Leu Pro Glu Ser Phe
 1525 1530 1535
 Pro Val Arg Met Arg His Phe Val Gly Cys Met Lys Asp Leu Gln Val
 1540 1545 1550
 Asp Ser Arg His Ile Asp Met Ala Asp Phe Ile Ala Asn Asn Gly Thr
 1555 1560 1565
 Val Pro Gly Cys Pro Thr Lys Lys Ile Val Cys Asp Ser Ser Ile Cys
 1570 1575 1580
 His Asn Gly Gly Thr Cys Val Asn Gln Trp Asn Thr Phe Ser Cys Glu
 1585 1590 1595 1600
 Cys Pro Leu Gly Phe Gly Gly Lys Ser Cys Ala Gln Glu Met Ala Asn
 1605 1610 1615
 Pro Gln Arg Phe Leu Gly Ser Ser Leu Val Ala Trp His Gly Leu Tyr
 1620 1625 1630
 Leu Pro Ile Ser Gln Pro Trp His Leu Asn Leu Met Phe Arg Thr Arg
 1635 1640 1645
 Gln Ala Asp Gly Val Leu Leu Gln Ala Val Thr Arg Gly Arg Ser Thr
 1650 1655 1660
 Ile Thr Leu Gln Leu Arg Ala Gly His Val Arg Leu Ser Met Glu Gly
 1665 1670 1675 1680
 Thr Gly Leu Gln Ala Ser Ser Leu His Leu Glu Pro Gly Arg Ala Asn
 1685 1690 1695
 Asp Gly Asp Trp His His Ala Gln Leu Ala Leu Gly Ala Ser Arg Gly
 1700 1705 1710
 Pro Gly His Ala Ile Leu Ser Phe Asn Tyr Gly Gln Gln Thr Ala Glu
 1715 1720 1725
 Gly Asn Leu Gly Pro Arg Leu His Gly Leu His Leu Ser Asn Ile Thr
 1730 1735 1740
 Val Gly Gly Val Pro Gly Pro Ala Ser Gly Val Ala Arg Gly Phe Arg
 1745 1750 1755 1760

Gly Cys Leu Gln Gly Val Arg Val Ser Glu Thr Pro Glu Gly Val His
 1765 1770 1775
 Ser Leu Asp Pro Ser Arg Gly Glu Ser Ile Asn Val Glu Pro Gly Cys
 1780 1785 1790
 Ser Leu Pro Asp Pro Cys Asp Ser Asn Pro Cys Pro Thr Asn Ser Tyr
 1795 1800 1805
 Tyr Ser Asn Asp Trp Asn Ser Tyr Ser Cys Ser Cys Val Leu Gly Tyr
 1810 1815 1820
 Tyr Gly Asp Asn Cys Thr Asn Val Cys Asp Leu Asn Pro Cys Glu His
 1825 1830 1835 1840
 Gln Ser Val Cys Thr Arg Lys Pro Asn Thr Pro His Gly Tyr Ile Cys
 1845 1850 1855
 Glu Cys Leu Pro Asn Tyr Leu Gly Pro Tyr Cys Glu Thr Arg Ile Asp
 1860 1865 1870
 Gln Pro Cys Pro Arg Gly Trp Trp Gly His Pro Thr Cys Gly Pro Cys
 1875 1880 1885
 Asn Cys Asp Val Ser Lys Gly Phe Asp Pro Asp Cys Asn Lys Thr Ser
 1890 1895 1900
 Gly Glu Cys His Cys Lys Glu Lys His Tyr Arg Pro Pro Gly Ser Pro
 1905 1910 1915 1920
 Thr Cys Leu Leu Cys Asp Cys Tyr Pro Thr Gly Ser Leu Ser Arg Val
 1925 1930 1935
 Cys Asp Pro Glu Asp Gly Gln Cys Pro Cys Lys Pro Gly Val Ile Gly
 1940 1945 1950
 Arg Gln Cys Asp Arg Cys Asp Asn Pro Phe Ala Glu Val Thr Thr Asn
 1955 1960 1965
 Gly Cys Glu Val Asn Tyr Asp Ser Cys Pro Arg Ala Ile Glu Ala Gly
 1970 1975 1980
 Ile Trp Trp Pro Arg Thr Arg Phe Gly Leu Pro Ala Ala Ala Pro Cys
 1985 1990 1995 2000
 Pro Lys Gly Ser Phe Gly Thr Ala Val Arg His Cys Asp Glu His Arg
 2005 2010 2015
 Gly Trp Leu Pro Pro Asn Leu Phe Asn Cys Thr Ser Val Thr Phe Ser
 2020 2025 2030
 Glu Leu Lys Gly Phe Ala Glu Arg Leu Gln Arg Asn Glu Ser Gly Leu
 2035 2040 2045
 Asp Ser Gly Arg Ser Gln Arg Leu Ala Leu Leu Arg Asn Ala Thr
 2050 2055 2060

Gln His Thr Ser Gly Tyr Phe Gly Ser Asp Val Lys Val Ala Tyr Gln
 2065 2070 2075 2080
 Leu Ala Thr Arg Leu Leu Ala His Glu Ser Ala Gln Arg Gly Phe Gly
 2085 2090 2095
 Leu Ser Ala Thr Gln Asp Val His Phe Thr Glu Asn Leu Leu Arg Val
 2100 2105 2110
 Gly Ser Ala Leu Leu Asp Ala Ala Asn Lys Arg His Trp Glu Leu Ile
 2115 2120 2125
 Gln Gln Thr Glu Gly Gly Thr Ala Trp Leu Leu Gln His Tyr Glu Ala
 2130 2135 2140
 Tyr Ala Ser Ala Leu Ala Gln Asn Met Arg His Thr Tyr Leu Ser Pro
 2145 2150 2155 2160
 Phe Thr Ile Val Thr Pro Asn Ile Val Ile Ser Val Val Arg Leu Asp
 2165 2170 2175
 Lys Gly Asn Phe Ala Gly Thr Lys Leu Pro Arg Tyr Glu Ala Leu Arg
 2180 2185 2190
 Gly Glu Arg Pro Pro Asp Val Glu Thr Thr Val Ile Leu Pro Glu Ser
 2195 2200 2205
 Val Phe Arg Glu Met Pro Ser Met Val Arg Ser Ala Gly Pro Gly Glu
 2210 2215 2220
 Ala Gln Glu Thr Glu Glu Leu Ala Arg Arg Gln Arg Arg His Pro Glu
 2225 2230 2235 2240
 Leu Ser Gln Gly Glu Ala Val Ala Ser Val Ile Ile Tyr His Thr Leu
 2245 2250 2255
 Ala Gly Leu Leu Pro His Asn Tyr Asp Pro Asp Lys Arg Ser Leu Arg
 2260 2265 2270
 Val Pro Lys Arg Pro Val Ile Asn Thr Pro Ala Val Ser Ile Ser Val
 2275 2280 2285
 His Asp Asp Glu Glu Leu Leu Pro Arg Ala Leu Asp Lys Pro Val Thr
 2290 2295 2300
 Val Gln Phe Arg Leu Leu Glu Thr Glu Glu Arg Thr Lys Pro Ile Cys
 2305 2310 2315 2320
 Val Phe Trp Asn His Ser Ile Leu Val Ser Gly Thr Gly Gly Trp Ser
 2325 2330 2335
 Ala Arg Gly Cys Glu Val Val Phe Arg Asn Glu Ser His Val Ser Cys
 2340 2345 2350
 Gln Cys Asn His Met Thr Ser Phe Ala Val Leu Met Asp Met Ser Arg
 2355 2360 2365

Arg Glu Asn Gly Glu Ile Leu Pro Leu Lys Thr Leu Thr Tyr Val Ala
 2370 2375 2380

Leu Gly Val Thr Leu Ala Ala Leu Met Leu Thr Phe Leu Phe Leu Thr
 2385 2390 2395 2400

Ileu Ileu Arg Ala Leu Arg Ser Asn Gln His Gly Ile Arg Arg Asn Leu
 2405 2410 2415

Thr Ala Ala Leu Gly Leu Ala Gln Leu Val Phe Leu Leu Gly Ile Asn
 2420 2425 2430

Gln Ala Asp Leu Pro Phe Ala Cys Thr Val Ile Ala Ile Leu Leu His
 2435 2440 2445

Phe Leu Tyr Leu Cys Thr Phe Ser Trp Ala Leu Leu Gly Ala Leu His
 2450 2455 2460

Leu Tyr Arg Ala Leu Thr Glu Val Arg Asp Val Asn Ala Ser Pro Met
 2465 2470 2475 2480

Arg Phe Tyr Tyr Met Leu Gly Trp Gly Val Pro Ala Phe Ile Thr Gly
 2485 2490 2495

Leu Ala Val Gly Leu Asp Pro Glu Gly Tyr Gly Asn Pro Asp Phe Cys
 2500 2505 2510

Trp Leu Ser Val Tyr Asp Thr Leu Ile Trp Ser Phe Ala Gly Pro Val
 2515 2520 2525

Ala Phe Ala Val Ser Met Arg Val Phe Leu Tyr Ile Leu Ser Ala Arg
 2530 2535 2540

Ala Ser Cys Ala Ala Gln Arg Gln Gly Phe Glu Lys Lys Gly Pro Val
 2545 2550 2555 2560

Ser Gly Leu Arg Ser Ser Phe Thr Val Leu Leu Leu Leu Ser Ala Thr
 2565 2570 2575

Trp Leu Leu Ala Leu Leu Ser Val Asn Ser Asp Thr Leu Leu Phe His
 2580 2585 2590

Tyr Leu Phe Ala Ala Cys Asn Cys Val Gln Gly Pro Phe Ile Phe Leu
 2595 2600 2605

Ser Tyr Val Val Leu Ser Lys Glu Val Arg Lys Ala Leu Lys Phe Ala
 2610 2615 2620

Cys Ser Arg Lys Pro Ser Pro Asp Pro Ala Leu Thr Thr Lys Tyr Thr
 2625 2630 2635 2640

Leu Thr Ser Ser Tyr Asn Cys Pro Ser Pro Tyr Ala Asp Gly Arg Leu
 2645 2650 2655

Tyr Gln Pro Tyr Gly Asp Ser Ala Gly Ser Leu His Ser Ala Ser Arg
 2660 2665 2670

Ser Gly Lys Ser Gln Pro Ser Tyr Ile Pro Phe Leu Leu Arg Glu Glu
2675 2680 2685

Ser Thr Leu Asn Pro Gly Gln Val Pro Pro Gly Leu Gly Asp Pro Ser
2690 2695 2700

Gly Leu Phe Leu Glu Gly Gln Ala Gln Gln His Asp Pro Asp Thr Asp
2705 2710 2715 2720

Ser Asp Ser Asp Leu Ser Leu Glu Asp Asp Gln Ser Gly Ser Tyr Ala
2725 2730 2735

Ser Thr His Ser Ser Asp Ser Glu Glu Glu Glu Glu Ala Ala Phe
2740 2745 2750

Pro Gly Glu Gln Gly Trp Asp Ser Cys Leu Gly Pro Gly Ala Glu Arg
2755 2760 2765

Leu Pro Leu His Ser Thr Pro Lys Asp Gly Gly Pro Gly Ser Gly Lys
2770 2775 2780

Val Pro Trp Leu Gly Asp Phe Gly Thr Thr Thr Lys Glu Asn Ser Gly
2785 2790 2795 2800

Ser Gly Ala Leu Glu Glu Arg Pro Arg Glu Asn Gly Asp Ala Leu Thr
2805 2810 2815

Arg Glu Gly Ser Leu Gly Pro Leu Pro Gly Pro Ser Thr Gln Pro His
2820 2825 2830

Lys Gly Ile Leu Lys Lys Lys Cys Leu Pro Thr Ile Ser Glu Lys Ser
2835 2840 2845

Ser Leu Leu Arg Leu Pro Leu Glu Gln Gly Thr Gly Ser Ser Arg Gly
2850 2855 2860

Ser Ser Ile Ser Glu Gly Ser Arg His Gly Pro Pro Pro Arg Pro Pro
2865 2870 2875 2880

Pro Arg Gln Ser Leu Gln Glu Gln Leu Asn Gly Val Met Pro Val Ala
2885 2890 2895

Met Ser Ile Asn Ala Gly Thr Val Asp Glu Asp Ser Ser Gly Ser Glu
2900 2905 2910

Phe Leu Phe Phe Asn Phe Leu His
2915 2920

<210> 72

<211> 107

<212> PRT

<213> Homo sapiens

<400> 72

Tyr Ser Ala Ser Val Pro Glu Asn Ala Pro Val Gly Thr Glu Val Leu
1 10 15

Thr Val Thr Ala Thr Asp Ala Asp Asp Pro Leu Gly Pro Asn Gly Arg
20 25 30

Ile Arg Tyr Ser Ile Leu Gly Gly Asn Pro Gly Gly Trp Phe Arg Ile
35 40 45

Asp Pro Asp Thr Gly Asp Asn Glu Gly Ile Ile Ser Thr Thr Lys Pro
50 55 60

Leu Asp Arg Glu Glu Ile Phe Asn Gly Glu Tyr Glu Leu Thr Val Glu
65 70 75 80

Ala Thr Asp Ala Asp Pro Leu Ser Ala Ala Gly Gly Ser Pro Pro Leu
85 90 95

Ser Gly Thr Ala Thr Val Thr Ile Thr Val Leu
100 105

<210> 73
<211> 107
<212> PRT
<213> Homo sapiens

<400> 73
Tyr Ser Ala Ser Val Pro Glu Asn Ala Pro Val Gly Thr Glu Val Leu
1 5 10 15

Thr Val Thr Ala Thr Asp Ala Asp Asp Pro Leu Gly Pro Asn Gly Arg
20 25 30

Ile Arg Tyr Ser Ile Leu Gly Gly Asn Pro Gly Gly Trp Phe Arg Ile
35 40 45

Asp Pro Asp Thr Gly Asp Asn Glu Gly Ile Ile Ser Thr Thr Lys Pro
50 55 60

Leu Asp Arg Glu Glu Ile Phe Asn Gly Glu Tyr Glu Leu Thr Val Glu
65 70 75 80

Ala Thr Asp Ala Asp Pro Leu Ser Ala Ala Gly Gly Ser Pro Pro Leu
85 90 95

Ser Gly Thr Ala Thr Val Thr Ile Thr Val Leu
100 105

<210> 74
<211> 107
<212> PRT
<213> Homo sapiens

<400> 74
Tyr Ser Ala Ser Val Pro Glu Asn Ala Pro Val Gly Thr Glu Val Leu
1 5 10 15

Thr Val Thr Ala Thr Asp Ala Asp Asp Pro Leu Gly Pro Asn Gly Arg
20 25 30

Ile Arg Tyr Ser Ile Leu Gly Gly Asn Pro Gly Gly Trp Phe Arg Ile
35 40 45

Asp Pro Asp Thr Gly Asp Asn Glu Gly Ile Ile Ser Thr Thr Lys Pro
50 55 60

Leu Asp Arg Glu Glu Ile Phe Asn Gly Glu Tyr Glu Leu Thr Val Glu
65 70 75 80

Ala Thr Asp Ala Asp Pro Leu Ser Ala Ala Gly Gly Ser Pro Pro Leu
85 90 95

Ser Gly Thr Ala Thr Val Thr Ile Thr Val Leu
100 105

<210> 75

<211> 107

<212> PRT

<213> Homo sapiens

<400> 75

Tyr Ser Ala Ser Val Pro Glu Asn Ala Pro Val Gly Thr Glu Val Leu
1 5 10 15

Thr Val Thr Ala Thr Asp Ala Asp Asp Pro Leu Gly Pro Asn Gly Arg
20 25 30

Ile Arg Tyr Ser Ile Leu Gly Gly Asn Pro Gly Gly Trp Phe Arg Ile
35 40 45

Asp Pro Asp Thr Gly Asp Asn Glu Gly Ile Ile Ser Thr Thr Lys Pro
50 55 60

Leu Asp Arg Glu Glu Ile Phe Asn Gly Glu Tyr Glu Leu Thr Val Glu
65 70 75 80

Ala Thr Asp Ala Asp Pro Leu Ser Ala Ala Gly Gly Ser Pro Pro Leu
85 90 95

Ser Gly Thr Ala Thr Val Thr Ile Thr Val Leu
100 105

<210> 76

<211> 107

<212> PRT

<213> Homo sapiens

<400> 76

Tyr Ser Ala Ser Val Pro Glu Asn Ala Pro Val Gly Thr Glu Val Leu
1 5 10 15

Thr Val Thr Ala Thr Asp Ala Asp Asp Pro Leu Gly Pro Asn Gly Arg

20

25

30

Ile Arg Tyr Ser Ile Leu Gly Gly Asn Pro Gly Gly Trp Phe Arg Ile
35 40 45

Asp Pro Asp Thr Gly Asp Asn Glu Gly Ile Ile Ser Thr Thr Lys Pro
50 55 60

Leu Asp Arg Glu Glu Ile Phe Asn Gly Glu Tyr Glu Leu Thr Val Glu
65 70 75 80

Ala Thr Asp Ala Asp Pro Leu Ser Ala Ala Gly Gly Ser Pro Pro Leu
85 90 95

Ser Gly Thr Ala Thr Val Thr Ile Thr Val Leu
100 105

<210> 77

<211> 107

<212> PRT

<213> Homo sapiens

<400> 77

Tyr Ser Ala Ser Val Pro Glu Asn Ala Pro Val Gly Thr Glu Val Leu
1 5 10 15

Thr Val Thr Ala Thr Asp Ala Asp Asp Pro Leu Gly Pro Asn Gly Arg
20 25 30

Ile Arg Tyr Ser Ile Leu Gly Gly Asn Pro Gly Gly Trp Phe Arg Ile
35 40 45

Asp Pro Asp Thr Gly Asp Asn Glu Gly Ile Ile Ser Thr Thr Lys Pro
50 55 60

Leu Asp Arg Glu Glu Ile Phe Asn Gly Glu Tyr Glu Leu Thr Val Glu
65 70 75 80

Ala Thr Asp Ala Asp Pro Leu Ser Ala Ala Gly Gly Ser Pro Pro Leu
85 90 95

Ser Gly Thr Ala Thr Val Thr Ile Thr Val Leu
100 105

<210> 78

<211> 107

<212> PRT

<213> Homo sapiens

<400> 78

Tyr Ser Ala Ser Val Pro Glu Asn Ala Pro Val Gly Thr Glu Val Leu
1 5 10 15

Thr Val Thr Ala Thr Asp Ala Asp Asp Pro Leu Gly Pro Asn Gly Arg
20 25 30

Ile Arg Tyr Ser Ile Leu Gly Gly Asn Pro Gly Gly Trp Phe Arg Ile
35 40 45

Asp Pro Asp Thr Gly Asp Asn Glu Gly Ile Ile Ser Thr Thr Lys Pro
50 55 60

Leu Asp Arg Glu Glu Ile Phe Asn Gly Glu Tyr Glu Leu Thr Val Glu
65 70 75 80

Ala Thr Asp Ala Asp Pro Leu Ser Ala Ala Gly Gly Ser Pro Pro Leu
85 90 95

Ser Gly Thr Ala Thr Val Thr Ile Thr Val Leu
100 105

<210> 79
<211> 107
<212> PRT
<213> Homo sapiens

<400> 79
Tyr Ser Ala Ser Val Pro Glu Asn Ala Pro Val Gly Thr Glu Val Leu
1 5 10 15

Thr Val Thr Ala Thr Asp Ala Asp Asp Pro Leu Gly Pro Asn Gly Arg
20 25 30

Ile Arg Tyr Ser Ile Leu Gly Gly Asn Pro Gly Gly Trp Phe Arg Ile
35 40 45

Asp Pro Asp Thr Gly Asp Asn Glu Gly Ile Ile Ser Thr Thr Lys Pro
50 55 60

Leu Asp Arg Glu Glu Ile Phe Asn Gly Glu Tyr Glu Leu Thr Val Glu
65 70 75 80

Ala Thr Asp Ala Asp Pro Leu Ser Ala Ala Gly Gly Ser Pro Pro Leu
85 90 95

Ser Gly Thr Ala Thr Val Thr Ile Thr Val Leu
100 105

<210> 80
<211> 45
<212> PRT
<213> Homo sapiens

<400> 80
Cys Ala Pro Asn Asn Pro Cys Ser Asn Gly Gly Thr Cys Val Asn Thr
1 5 10 15

Pro Gly Gly Ser Ser Asp Asn Phe Gly Gly Tyr Thr Cys Glu Cys Pro
20 25 30

Pro Gly Asp Tyr Tyr Leu Ser Tyr Thr Gly Lys Arg Cys
 35 40 45

<210> 81

<211> 45

<212> PRT

<213> Homo sapiens

<400> 81

Cys Ala Pro Asn Asn Pro Cys Ser Asn Gly Gly Thr Cys Val Asn Thr
 1 5 10 15

Pro Gly Gly Ser Ser Asp Asn Phe Gly Gly Tyr Thr Cys Glu Cys Pro
 20 25 30

Pro Gly Asp Tyr Tyr Leu Ser Tyr Thr Gly Lys Arg Cys
 35 40 45

<210> 82

<211> 77

<212> PRT

<213> Homo sapiens

<400> 82

Phe Arg Thr Thr Glu Pro Ser Gly Leu Leu Leu Gly Tyr Gly Gly
 1 5 10 15

Thr Asn Thr Asp Arg Gly Gly Lys Lys Glu Ile Gly Asp Asp Phe Leu
 20 25 30

Ala Leu Glu Leu Val Asp Gly Arg Leu Glu Val Ser Tyr Asp Leu Gly
 35 40 45

Ser Gly His Arg Leu Arg Pro Ala Val Val Arg Ser Gly Asp Arg Val
 50 55 60

Leu Asn Asp Gly Lys Trp His Arg Val Glu Leu Glu Arg
 65 70 75

<210> 83

<211> 45

<212> PRT

<213> Homo sapiens

<400> 83

Cys Ala Pro Asn Asn Pro Cys Ser Asn Gly Gly Thr Cys Val Asn Thr
 1 5 10 15

Pro Gly Gly Ser Ser Asp Asn Phe Gly Gly Tyr Thr Cys Glu Cys Pro
 20 25 30

Pro Gly Asp Tyr Tyr Leu Ser Tyr Thr Gly Lys Arg Cys
 35 40 45

<210> 84
 <211> 161
 <212> PRT
 <213> Homo sapiens

<400> 84
 Phe Arg Thr Thr Glu Pro Ser Gly Leu Leu Leu Glv Tyr Gly Gly
 1 5 10 15
 Thr Asn Thr Asp Arg Gly Gly Lys Lys Glu Ile Gly Asp Asp Phe Leu
 20 25 30
 Ala Leu Glu Leu Val Asp Gly Arg Leu Glu Val Ser Tyr Asp Leu Gly
 35 40 45
 Ser Gly His Arg Leu Arg Pro Ala Val Val Arg Ser Gly Asp Arg Val
 50 55 60
 Leu Asn Asp Gly Lys Trp His Arg Val Glu Leu Glu Arg Asn Gly Arg
 65 70 75 80
 Lys Gly Thr Leu Ser Val Asp Gly Glu Glu Pro Ser Lys Lys Thr Leu
 85 90 95
 Ser Glu Thr Val Val Asp Gly Glu Ser Pro Ser Gly Pro Asp Val Thr
 100 105 110
 Ser Glu Asn Leu Asp Leu Asp Thr Pro Pro Ile Leu Tyr Val Gly Gly
 115 120 125
 Leu Pro Glu Gln Lys Ser Val Lys Arg Arg Leu Ala Ala Ile Ser Thr
 130 135 140
 Ser Phe Lys Gly Cys Ile Arg Asp Val Ser Ile Asn Gly Lys Pro Leu
 145 150 155 160
 Asp

<210> 85
 <211> 45
 <212> PRT
 <213> Homo sapiens

<400> 85
 Cys Ala Pro Asn Asn Pro Cys Ser Asn Gly Gly Thr Cys Val Asn Thr
 1 5 10 15
 Pro Gly Gly Ser Ser Asp Asn Phe Gly Gly Tyr Thr Cys Glu Cys Pro
 20 25 30
 Pro Gly Asp Tyr Tyr Leu Ser Tyr Thr Gly Lys Arg Cys
 35 40 45

<210> 86
 <211> 45
 <212> PRT
 <213> Homo sapiens

<400> 86
 Cys Ala Pro Asn Asn Pro Cys Ser Asn Gly Gly Thr Cys Val Asn Thr
 1 5 10 15
 Pro Gly Gly Ser Ser Asn Phe Gly Gly Thr Thr Cys Glu Cys Pro
 20 25 30
 Pro Gly Asp Tyr Tyr Leu Ser Tyr Thr Gly Lys Arg Cys
 35 40 45

<210> 87
 <211> 79
 <212> PRT
 <213> Homo sapiens

<400> 87
 Gly Leu Tyr Cys Pro Ala Thr Trp Asp Gly Ile Leu Cys Trp Pro Arg
 1 5 10 15
 Thr Pro Ala Gly Thr Leu Val Val Val Pro Cys Pro Asp Tyr Phe Ser
 20 25 30
 Gly Phe Asn Tyr Asp Thr Thr Gly Glu Asp Phe Ser Asn Gly Asn Ala
 35 40 45
 Ser Arg Asn Cys Thr Glu Asn Gly Trp Trp Glu Arg His Pro Asn Ser
 50 55 60
 Asn Trp Pro Trp Pro Asp Tyr Thr Asn Cys Thr Ser Pro Glu Tyr
 65 70 75

<210> 88
 <211> 54
 <212> PRT
 <213> Homo sapiens

<400> 88
 Ser Asn Pro Ile Cys Val Phe Trp Asp Glu Ser Glu Leu Ser Leu Gly
 1 5 10 15
 Val Trp Ser Thr Asp Arg Gly Cys Glu Leu Val Glu Thr Ser Lys Pro
 20 25 30
 Ser His Thr Thr Cys Ser Cys Asn His Leu Thr Ser Phe Ala Val Leu
 35 40 45
 Met Asp Val Ser Pro Asn
 50

<210> 89

<211> 273

<212> PRT

<213> Homo sapiens

<400> 89

Ala Leu Leu Leu Lys Val Ile Tyr Thr Val Gly Tyr Ser Leu Ser Ser
1 5 10 15
Leu Val Cys Leu Leu Leu Ala Ile Ala Ile Phe Leu Leu Phe Arg Lys
20 25 30
Leu Arg Cys Thr Arg Asn Tyr Ile His Met Asn Leu Phe Leu Ser Phe
35 40 45
Ile Leu Arg Ala Leu Ser Phe Leu Ile Gly Asp Ala Val Leu Leu Asn
50 55 60
Ser Gly Cys Lys Val Val Ala Val Phe Leu His Tyr Phe Phe Leu Ala
65 70 75 80
Asn Phe Phe Trp Met Leu Val Glu Gly Leu Tyr Leu Tyr Thr Leu Leu
85 90 95
Val Val Thr Val Glu Val Phe Phe Ser Glu Arg Lys Arg Leu Trp Trp
100 105 110
Tyr Leu Leu Ile Gly Trp Gly Val Pro Ala Val Phe Val Thr Ile Trp
115 120 125
Ala Ile Val Arg Pro Asp Lys Tyr Gly Pro Ile Leu Ala Glu Gly Pro
130 135 140
Ala Gly Tyr Gly Asn Glu Gly Cys Cys Trp Leu Ser Asn Asp Thr Asn
145 150 155 160
Ser Gly Phe Trp Trp Ile Ile Lys Gly Pro Ile Leu Leu Ile Ile Leu
165 170 175
Val Asn Phe Ile Phe Phe Ile Asn Ile Leu Arg Ile Leu Val Gln Lys
180 185 190
Leu Arg Ile Asp Ser Leu Ser Pro Gln Thr Gly Glu Thr Asp Gln Tyr
195 200 205
Arg Lys Lys Arg Leu Val Lys Ser Thr Leu Leu Leu Leu Pro Leu Leu
210 215 220
Gly Val Thr Trp Ile Leu Phe Leu Phe Ala Pro Glu Asp Gln Ser Gln
225 230 235 240
Gly Thr Leu Ser Leu Val Phe Leu Tyr Leu Phe Leu Ile Leu Asn Ser
245 250 255
Phe Gln Gly Phe Phe Val Ala Val Leu Tyr Cys Phe Leu Asn Gly Glu
260 265 270

Val

<210> 90
<211> 338
<212> PPT
<213> Homo sapiens

<400> 90

Leu	Gly	Leu	Leu	Arg	Leu	Gly	Phe	Leu	Val	Glu	Phe	Leu	Ser	Arg	Ala
1				5					10					15	
Val	Ile	Ser	Gly	Phe	Met	Ala	Gly	Ala	Ala	Ile	Leu	Ile	Leu	Leu	Ser
			20					25					30		
Gln	Leu	Lys	Gly	Leu	Leu	Gly	Leu	Ser	Asn	Leu	Phe	Thr	Arg	His	Ser
		35					40					45			
Gly	Ile	Val	Ser	Val	Leu	Arg	Ala	Leu	Phe	Asp	Leu	Val	Asp	Asn	Leu
	50					55					60				
His	Asp	Phe	Leu	Lys	Trp	Asn	Trp	Ala	Thr	Leu	Val	Ile	Gly	Ile	Ser
	65				70					75					80
Phe	Leu	Ile	Phe	Leu	Leu	Ile	Ile	Lys	Leu	Leu	Pro	Asn	Pro	Lys	Lys
				85					90					95	
Arg	Lys	Lys	Lys	Leu	Phe	Trp	Val	Pro	Ala	Pro	Ala	Pro	Leu	Val	Ala
			100					105					110		
Val	Ile	Leu	Ala	Thr	Leu	Ile	Ser	Tyr	Leu	Phe	Asn	Arg	His	Lys	Leu
	115					120						125			
Ala	Asp	Arg	Tyr	Gly	Val	Ser	Ile	Val	Gly	Glu	Ile	Pro	Ser	Gly	Leu
	130				135						140				
Pro	Pro	Pro	Ser	Leu	Pro	Arg	Leu	Asn	Leu	Ser	Pro	Ser	Thr	Leu	Leu
145				150						155				160	
Asp	Leu	Leu	Pro	Ile	Ala	Leu	Ala	Leu	Ala	Leu	Val	Gly	Leu	Leu	Glu
			165					170					175		
Ser	Ile	Leu	Thr	Ala	Lys	Ser	Phe	Ala	Lys	Ile	Lys	Gly	Tyr	Lys	Ile
		180					185					190			
Asp	Ser	Asn	Lys	Glu	Leu	Val	Ala	Gln	Gly	Ile	Ala	Asn	Ile	Val	Gly
	195					200						205			
Ser	Leu	Phe	Gly	Gly	Tyr	Pro	Ala	Thr	Gly	Ser	Phe	Ser	Arg	Ser	Ala
	210					215					220				
Val	Asn	Val	Lys	Ala	Gly	Ala	Lys	Thr	Gln	Leu	Ser	Gly	Ile	Val	Met
225				230						235				240	
Ala	Val	Val	Val	Leu	Leu	Val	Leu	Leu	Phe	Leu	Thr	Pro	Leu	Leu	Glu
			245					250						255	

Tyr Ile Pro Met Ala Val Leu Ala Ala Ile Ile Ile Val Ala Leu Ile
 260 265 270
 Gly Met Leu Ile Asp Trp Ser Glu Leu Ile Arg Leu Leu Trp Lys Leu
 275 280 285
 Ser Lys Leu Asp Phe Leu Ile Trp Leu Ala Thr Phe Phe Gly Thr Val
 290 295 300
 Phe Val Asp Asn Leu Glu Ile Gly Val Leu Val Gly Val Ala Ile Ser
 305 310 315 320
 Leu Leu Phe Leu Ile Leu Arg Val
 325

<210> 91
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 91
 Tyr Ile Glu Ala Glu Thr Ile Pro Gly Ile Glu Val Leu Ile Leu Arg
 1 5 10 15
 Leu Ser Gly Pro Leu Asp Phe Ala Asn Ala Glu Leu Lys Glu Arg Leu
 20 25 30
 Leu Arg Ala Ile Ala Glu Gly Pro Glu Arg Lys Lys Ile Glu Leu Arg
 35 40 45
 His Val Ile Leu Asp Leu Ser Ala Val Ser Phe Ile Asp Ser Ser Gly
 50 55 60
 Leu Gly Ala Leu Leu Glu Leu Tyr Lys Glu Leu Lys Lys Arg Gly Val
 65 70 75 80
 Glu Leu Val Leu Val Gly Pro Ser Pro Glu Val Arg Arg Thr Leu Glu
 85 90 95
 Leu Thr Gly Leu Asp Asp Leu Ile Gly Lys Glu Lys Ile Phe Pro Thr
 100 105 110
 Val Ala Glu Ala
 115

<210> 92
 <211> 461
 <212> PRT
 <213> Homo sapiens

<400> 92
 Met Gln Arg Val Asn Met Ile Met Ala Glu Ser Pro Gly Leu Ile Thr
 1 5 10 15

Ile Cys Leu Leu Gly Tyr Leu Leu Ser Ala Glu Cys Thr Val Phe Leu
 20 25 30
 Asp His Glu Asn Ala Asn Lys Ile Leu Asn Arg Pro Lys Arg Tyr Asn
 35 40 45
 Ser Gly Lys Leu Glu Glu Phe Val Gln Gly Asn Leu Glu Arg Glu Cys
 50 55 60
 Met Glu Glu Lys Cys Ser Phe Glu Glu Ala Arg Glu Val Phe Glu Asn
 65 70 75 80
 Thr Glu Arg Thr Thr Glu Phe Trp Lys Gln Tyr Val Asp Gly Asp Gln
 85 90 95
 Cys Glu Ser Asn Pro Cys Leu Asn Gly Gly Ser Cys Lys Asp Asp Ile
 100 105 110
 Asn Ser Tyr Glu Cys Trp Cys Pro Phe Gly Phe Glu Gly Lys Asn Cys
 115 120 125
 Glu Leu Asp Val Thr Cys Asn Ile Lys Asn Gly Arg Cys Glu Gln Phe
 130 135 140
 Cys Lys Asn Ser Ala Asp Asn Lys Val Val Cys Ser Cys Thr Glu Gly
 145 150 155 160
 Tyr Arg Leu Ala Glu Asn Gln Lys Ser Cys Glu Pro Ala Val Pro Phe
 165 170 175
 Pro Cys Gly Arg Val Ser Val Ser Gln Thr Ser Lys Leu Thr Arg Ala
 180 185 190
 Glu Ala Val Phe Pro Asp Val Asp Tyr Val Asn Ser Thr Glu Ala Glu
 195 200 205
 Thr Ile Leu Asp Asn Ile Thr Gln Ser Thr Gln Ser Phe Asn Asp Phe
 210 215 220
 Thr Arg Val Val Gly Gly Glu Asp Ala Lys Pro Gly Gln Phe Pro Trp
 225 230 235 240
 Gln Val Val Leu Asn Gly Lys Val Asp Ala Phe Cys Gly Gly Ser Ile
 245 250 255
 Val Asn Glu Lys Trp Ile Val Thr Ala Ala His Cys Val Glu Thr Gly
 260 265 270
 Val Lys Ile Thr Val Val Ala Gly Glu His Asn Ile Glu Glu Thr Glu
 275 280 285
 His Thr Glu Gln Lys Arg Asn Val Ile Arg Ile Ile Pro His His Asn
 290 295 300
 Tyr Asn Ala Ala Ile Asn Lys Tyr Asn His Asp Ile Ala Leu Leu Glu
 305 310 315 320

Leu Asp Glu Pro Leu Val Leu Asn Ser Tyr Val Thr Pro Ile Cys Ile
 325 330 335

Ala Asp Lys Glu Tyr Thr Asn Ile Phe Leu Lys Phe Gly Ser Gly Tyr
 340 345 350

Val Ser Gly Trp Gly Arg Val Phe His Lys Gly Arg Ser Ala Leu Val
 355 360 365

Leu Gln Tyr Leu Arg Val Pro Leu Val Asp Arg Ala Thr Cys Leu Arg
 370 375 380

Ser Thr Lys Phe Thr Ile Tyr Asn Asn Met Phe Cys Ala Gly Phe His
 385 390 395 400

Glu Gly Gly Arg Asp Ser Cys Gln Gly Asp Ser Gly Gly Pro His Val
 405 410 415

Thr Glu Val Glu Gly Thr Ser Phe Leu Thr Gly Ile Ile Ser Trp Gly
 420 425 430

Glu Glu Cys Ala Met Lys Gly Lys Tyr Gly Ile Tyr Thr Lys Val Ser
 435 440 445

Arg Tyr Val Asn Trp Ile Lys Glu Lys Thr Lys Leu Thr
 450 455 460

<210> 93
 <211> 461
 <212> PRT
 <213> Homo sapiens

<400> 93
 Met Gln Arg Val Asn Met Ile Met Ala Glu Ser Pro Gly Leu Ile Thr
 1 5 10 15

Ile Cys Leu Leu Gly Tyr Leu Leu Ser Ala Glu Cys Thr Val Phe Leu
 20 25 30

Asp His Glu Asn Ala Asn Lys Ile Leu Asn Arg Pro Lys Arg Tyr Asn
 35 40 45

Ser Gly Lys Leu Glu Glu Phe Val Gln Gly Asn Leu Glu Arg Glu Cys
 50 55 60

Met Glu Glu Lys Cys Ser Phe Glu Glu Ala Arg Glu Val Phe Glu Asn
 65 70 75 80

Thr Glu Arg Thr Thr Glu Phe Trp Lys Gln Tyr Val Asp Gly Asp Gln
 85 90 95

Cys Glu Ser Asn Pro Cys Leu Asn Gly Gly Ser Cys Lys Asp Asp Ile
 100 105 110

Asn Ser Tyr Glu Cys Trp Cys Pro Phe Gly Phe Glu Gly Lys Asn Cys
 115 120 125

Glu Leu Asp Val Thr Cys Asn Ile Lys Asn Gly Arg Cys Glu Gln Phe
 130 135 140
 Cys Lys Asn Ser Ala Asp Asn Lys Val Val Cys Ser Cys Thr Glu Gly
 145 150 155 160
 Tyr Arg Leu Ala Glu Asn Gln Lys Ser Cys Glu Pro Ala Val Pro Phe
 165 170 175
 Pro Cys Gly Arg Val Ser Val Ser Gln Thr Ser Lys Leu Thr Arg Ala
 180 185 190
 Glu Thr Val Phe Pro Asp Val Asp Tyr Val Asn Ser Thr Glu Ala Glu
 195 200 205
 Thr Ile Leu Asp Asn Ile Thr Gln Ser Thr Gln Ser Phe Asn Asp Phe
 210 215 220
 Thr Arg Val Val Gly Gly Glu Asp Ala Lys Pro Gly Gln Phe Pro Trp
 225 230 235 240
 Gln Val Val Leu Asn Gly Lys Val Asp Ala Phe Cys Gly Gly Ser Ile
 245 250 255
 Val Asn Glu Lys Trp Ile Val Thr Ala Ala His Cys Val Glu Thr Gly
 260 265 270
 Val Lys Ile Thr Val Val Ala Gly Glu His Asn Ile Glu Glu Thr Glu
 275 280 285
 His Thr Glu Gln Lys Arg Asn Val Ile Arg Ile Ile Pro His His Asn
 290 295 300
 Tyr Asn Ala Ala Ile Asn Lys Tyr Asn His Asp Ile Ala Leu Leu Glu
 305 310 315 320
 Leu Asp Glu Pro Leu Val Leu Asn Ser Tyr Val Thr Pro Ile Cys Ile
 325 330 335
 Ala Asp Lys Glu Tyr Thr Asn Ile Phe Leu Lys Phe Gly Ser Gly Tyr
 340 345 350
 Val Ser Gly Trp Gly Arg Val Phe His Lys Gly Arg Ser Ala Leu Val
 355 360 365
 Leu Gln Tyr Leu Arg Val Pro Leu Val Asp Arg Ala Thr Cys Leu Arg
 370 375 380
 Ser Thr Lys Phe Thr Ile Tyr Asn Asn Met Phe Cys Ala Gly Phe His
 385 390 395 400
 Glu Gly Gly Arg Asp Ser Cys Gln Gly Asp Ser Gly Gly Pro His Val
 405 410 415
 Thr Glu Val Glu Gly Thr Ser Phe Leu Thr Gly Ile Ile Ser Trp Gly
 420 425 430

Glu Glu Cys Ala Met Lys Gly Lys Tyr Gly Ile Tyr Thr Lys Val Ser
435 440 445

Arg Tyr Val Asn Trp Ile Lys Glu Lys Thr Lys Leu Thr
450 455 460

<210> 94

<211> 461

<212> PRT

<213> Pan troglodytes

<400> 94

Met Gln Arg Val Asn Met Ile Met Ala Glu Ser Pro Gly Leu Ile Thr
1 5 10 15

Ile Cys Leu Leu Gly Tyr Leu Leu Ser Ala Glu Cys Thr Val Phe Leu
20 25 30

Asp His Glu Asn Ala Asn Lys Ile Leu Asn Arg Pro Lys Arg Tyr Asn
35 40 45

Ser Gly Lys Leu Glu Glu Phe Val Gln Gly Asn Leu Glu Arg Glu Cys
50 55 60

Met Glu Glu Lys Cys Ser Phe Glu Glu Ala Arg Glu Val Phe Glu Asn
65 70 75 80

Thr Glu Arg Thr Thr Glu Phe Trp Lys Gln Tyr Val Asp Gly Asp Gln
85 90 95

Cys Glu Ser Asn Pro Cys Leu Asn Gly Gly Ser Cys Lys Asp Asp Ile
100 105 110

Asn Ser Tyr Glu Cys Trp Cys Pro Phe Gly Phe Glu Gly Lys Asn Cys
115 120 125

Glu Leu Asp Val Thr Cys Asn Ile Lys Asn Gly Arg Cys Glu Gln Phe
130 135 140

Cys Lys Asn Ser Ala Asp Asn Lys Val Val Cys Ser Cys Thr Glu Gly
145 150 155 160

Tyr Arg Leu Ala Glu Asn Gln Lys Ser Cys Glu Pro Ala Val Pro Phe
165 170 175

Pro Cys Gly Arg Val Ser Val Ser Gln Thr Ser Lys Leu Thr Arg Ala
180 185 190

Glu Thr Val Phe Pro Asp Val Asp Tyr Val Asn Ser Thr Glu Ala Glu
195 200 205

Thr Ile Leu Asp Asn Ile Thr Gln Ser Thr Gln Ser Phe Asn Asp Phe
210 215 220

Thr Arg Val Val Gly Gly Glu Asp Ala Lys Pro Gly Gln Phe Pro Trp

225	230	235	240
Glu Val Val Leu Asn Gly Lys Val Asp Ala Phe Cys Gly Gly Ser Ile	245	250	255
Val Asn Glu Lys Trp Ile Val Thr Ala Ala His Cys Val Asp Thr Gly	260	265	270
Val Lys Ile Thr Val Val Ala Gly Glu His Asn Ile Glu Glu Thr Glu	275	280	285
His Thr Glu Gln Lys Arg Asn Val Ile Arg Ile Ile Pro His His Asn	290	295	300
Tyr Asn Ala Ala Ile Asn Lys Tyr Asn His Asp Ile Ala Leu Leu Glu	305	310	315
Leu Asp Glu Pro Leu Val Leu Asn Ser Tyr Val Thr Pro Ile Cys Ile	325	330	335
Ala Asp Lys Glu Tyr Thr Asn Ile Phe Leu Lys Phe Gly Ser Gly Tyr	340	345	350
Val Ser Gly Trp Gly Arg Val Phe His Lys Gly Arg Ser Ala Leu Val	355	360	365
Leu Gln Tyr Leu Arg Val Pro Leu Val Asp Arg Ala Thr Cys Leu Arg	370	375	380
Ser Thr Lys Phe Thr Ile Tyr Asn Asn Met Phe Cys Ala Gly Phe His	385	390	395
Glu Gly Gly Arg Asp Ser Cys Gln Gly Asp Ser Gly Gly Pro His Val	405	410	415
Thr Glu Val Glu Gly Thr Ser Phe Leu Thr Gly Ile Ile Ser Trp Gly	420	425	430
Glu Glu Cys Ala Met Lys Gly Lys Tyr Gly Ile Tyr Thr Lys Val Ser	435	440	445
Arg Tyr Val Asn Trp Ile Lys Glu Lys Thr Lys Leu Thr	450	455	460

<210> 95
 <211> 456
 <212> PRT
 <213> Homo sapiens

<400> 95
 Met Ile Met Ala Glu Ser Pro Gly Leu Ile Thr Ile Cys Leu Leu Gly
 1 5 10 15
 Tyr Leu Leu Ser Ala Glu Cys Thr Val Phe Leu Asp His Glu Asn Ala
 20 25 30

Asn Lys Ile Leu Asn Arg Pro Lys Arg Tyr Asn Ser Gly Lys Leu Glu
 35 40 45
 Glu Phe Val Gln Gly Asn Leu Glu Arg Glu Cys Met Glu Glu Lys Cys
 50 55 60
 Ser Phe Glu Glu Ala Arg Glu Val Phe Glu Asn Thr Glu Arg Thr Thr
 65 70 75 80
 Glu Phe Trp Lys Gln Tyr Val Asn Gly Asn Gln Cys Glu Ser Asn Pro
 85 90 95
 Cys Leu Asn Gly Gly Ser Cys Lys Asp Asp Ile Asn Ser Tyr Glu Cys
 100 105 110
 Trp Cys Pro Phe Gly Phe Glu Gly Lys Asn Cys Glu Leu Asp Val Thr
 115 120 125
 Cys Asn Ile Lys Asn Gly Arg Cys Glu Gln Phe Cys Lys Asn Ser Ala
 130 135 140
 Asp Asn Lys Val Val Cys Ser Cys Thr Glu Gly Tyr Arg Leu Ala Glu
 145 150 155 160
 Asn Gln Lys Ser Cys Glu Pro Ala Val Pro Phe Pro Cys Gly Arg Val
 165 170 175
 Ser Val Ser Gln Thr Ser Lys Leu Thr Arg Ala Glu Thr Val Phe Pro
 180 185 190
 Asp Val Asp Tyr Val Asn Ser Thr Glu Ala Glu Thr Ile Leu Asp Asn
 195 200 205
 Ile Thr Gln Ser Thr Gln Ser Phe Asn Asp Phe Thr Arg Val Val Gly
 210 215 220
 Gly Glu Asp Ala Lys Pro Gly Gln Phe Pro Trp Gln Val Val Leu Asn
 225 230 235 240
 Gly Lys Val Asp Ala Phe Cys Gly Gly Ser Ile Val Asn Glu Lys Trp
 245 250 255
 Ile Val Thr Ala Ala His Cys Val Glu Thr Gly Val Lys Ile Thr Val
 260 265 270
 Val Ala Gly Glu His Asn Ile Glu Glu Thr Glu His Thr Glu Gln Lys
 275 280 285
 Arg Asn Val Ile Arg Ile Ile Pro His His Asn Tyr Asn Ala Ala Ile
 290 295 300
 Asn Lys Tyr Asn His Asp Ile Ala Leu Leu Glu Leu Asp Glu Pro Leu
 305 310 315 320
 Val Leu Asn Ser Tyr Val Thr Pro Ile Cys Ile Ala Asp Lys Glu Tyr
 325 330 335

Thr Asn Ile Phe Leu Lys Phe Gly Ser Gly Tyr Val Ser Gly Trp Gly
 340 345 350
 Arg Val Phe His Lys Gly Arg Ser Ala Leu Val Leu Gln Tyr Leu Arg
 355 360 365
 Val Pro Leu Val Asp Arg Ala Thr Cys Leu Arg Ser Thr Lys Phe Thr
 370 375 380
 Ile Tyr Asn Asn Met Phe Cys Ala Glv Phe His Glu Glv Glv Arg Asp
 385 390 395 400
 Ser Cys Gln Gly Asp Ser Gly Gly Pro His Val Thr Glu Val Glu Gly
 405 410 415
 Thr Ser Phe Leu Thr Gly Ile Ile Ser Trp Gly Glu Glu Cys Ala Met
 420 425 430
 Lys Gly Lys Tyr Gly Ile Tyr Thr Lys Val Ser Arg Tyr Val Asn Trp
 435 440 445
 Ile Lys Glu Lys Thr Lys Leu Thr
 450 455

<210> 96
 <211> 456
 <212> PRT
 <213> Homo sapiens

<100> 96
 Met Ile Met Ala Glu Ser Pro Gly Leu Ile Thr Ile Cys Leu Leu Gly
 1 5 10 15
 Tyr Leu Leu Ser Ala Glu Cys Thr Val Phe Leu Asp His Glu Asn Ala
 20 25 30
 Asn Lys Ile Leu Asn Arg Pro Lys Arg Tyr Asn Ser Gly Lys Leu Glu
 35 40 45
 Glu Phe Val Gln Gly Asn Leu Glu Arg Glu Cys Met Glu Glu Lys Cys
 50 55 60
 Ser Phe Glu Glu Ala Arg Glu Val Phe Glu Asn Thr Glu Arg Thr Thr
 65 70 75 80
 Glu Phe Trp Lys Gln Tyr Val Asp Gly Asp Gln Cys Glu Ser Asn Pro
 85 90 95
 Cys Leu Asn Gly Gly Ser Cys Lys Asp Asp Ile Asn Ser Tyr Glu Cys
 100 105 110
 Trp Cys Pro Phe Gly Phe Glu Gly Lys Asn Cys Glu Leu Asp Val Thr
 115 120 125
 Cys Asn Ile Lys Asn Gly Thr Cys Glu Gln Phe Cys Lys Asn Ser Ala
 130 135 140

Asp Asn Lys Val Val Cys Ser Cys Thr Glu Gly Tyr Arg Leu Ala Glu
 145 150 155 160
 Asn Gln Lys Ser Cys Glu Pro Ala Val Pro Phe Pro Cys Gly Arg Val
 165 170 175
 Ser Val Ser Gln Thr Ser Lys Leu Thr Arg Ala Glu Ala Val Phe Pro
 180 185 190
 Asp Val Asp Tyr Val Asn Ser Thr Glu Ala Glu Thr Ile Leu Asp Asn
 195 200 205
 Ile Thr Gln Ser Thr Gln Ser Phe Asn Asp Phe Thr Arg Val Val Gly
 210 215 220
 Gly Glu Asp Ala Lys Pro Gly Gln Phe Pro Trp Gln Val Val Leu Asn
 225 230 235 240
 Gly Lys Val Asp Ala Phe Cys Gly Gly Ser Ile Val Asn Glu Lys Trp
 245 250 255
 Ile Val Thr Ala Ala His Cys Val Glu Thr Gly Val Lys Ile Thr Val
 260 265 270
 Val Ala Gly Glu His Asn Ile Glu Glu Thr Glu His Thr Glu Gln Lys
 275 280 285
 Arg Asn Val Ile Arg Ile Ile Pro His His Asn Tyr Asn Ala Ala Ile
 290 295 300
 Asn Lys Tyr Asn His Asp Ile Ala Leu Leu Glu Leu Asp Glu Pro Leu
 305 310 315 320
 Val Leu Asn Ser Tyr Val Thr Pro Ile Cys Ile Ala Asp Lys Glu Tyr
 325 330 335
 Thr Asn Ile Phe Leu Lys Phe Gly Ser Gly Tyr Val Ser Gly Trp Gly
 340 345 350
 Arg Val Phe His Lys Gly Arg Ser Ala Leu Val Leu Gln Tyr Leu Arg
 355 360 365
 Val Pro Leu Val Asp Arg Ala Thr Cys Leu Arg Ser Thr Lys Phe Thr
 370 375 380
 Ile Tyr Asn Asn Met Phe Cys Ala Gly Leu His Glu Gly Ala Arg Asp
 385 390 395 400
 Ser Cys Gln Gly Asp Ser Gly Gly Pro His Val Thr Glu Val Glu Gly
 405 410 415
 Thr Ser Phe Leu Thr Gly Ile Ile Ser Trp Gly Glu Glu Cys Ala Met
 420 425 430
 Lys Gly Lys Tyr Gly Ile Tyr Thr Lys Val Ser Arg Tyr Val Asn Trp
 435 440 445

Ile Lys Glu Lys Thr Lys Leu Thr
450 455

<210> 97
<211> 42
<212> PRT
<213> Homo sapiens

<400> 97
Leu Glu Glu Leu Arg Lys Gly Asn Leu Glu Arg Glu Cys Leu Glu Glu
1 5 10 15

Val Cys Glu Leu Glu Glu Ala Arg Glu Ile Phe Glu Asp Thr Glu Gly
20 25 30

Thr Gln Glu Phe Trp Arg Lys Tyr Tyr Asp
35 40

<210> 98
<211> 45
<212> PRT
<213> Homo sapiens

<400> 98
Cys Ala Pro Asn Asn Pro Cys Ser Asn Gly Gly Thr Cys Val Asn Thr
1 5 10 15

Pro Gly Gly Ser Ser Asp Asn Phe Gly Gly Tyr Thr Cys Glu Cys Pro
20 25 30

Pro Gly Asp Tyr Tyr Leu Ser Tyr Thr Gly Lys Arg Cys
35 40 45

<210> 99
<211> 56
<212> PRT
<213> Homo sapiens

<400> 99
Cys Pro Ser Gly Gln Val Glu Val Asn Gly Glu Cys Val Lys Lys Val
1 5 10 15

Ala Ile Gly Glu Thr Gly Cys Leu Ala Ser Glu Gln Cys Pro Gly Arg
20 25 30

Trp Pro Gly Ser Gln Cys Ile Asp Gly Met Cys Gln Cys Pro Glu Gly
35 40 45

Phe Thr Ala Val Asn Gly Val Cys
50 55

<210> 100

<211> 259
 <212> PRT
 <213> Homo sapiens

<400> 100

Ile	Val	Gly	Gly	Arg	Glu	Ala	Gln	Pro	Gly	Ser	Phe	Gly	Ser	Pro	Trp
1				5					10					15	
Gln	Val	Ser	Leu	Gln	Val	Arg	Ser	Gly	Gly	Gly	Ser	Arg	Lys	His	Phe
			20					25					30		
Cys	Gly	Gly	Ser	Leu	Ile	Ser	Glu	Asn	Trp	Val	Leu	Thr	Ala	Ala	His
		35					40					45			
Cys	Val	Ser	Gly	Ala	Ala	Ser	Ala	Pro	Ala	Ser	Ser	Val	Arg	Val	Ser
	50					55					60				
Leu	Ser	Val	Arg	Leu	Gly	Glu	His	Asn	Leu	Ser	Leu	Thr	Glu	Gly	Thr
65					70					75					80
Glu	Gln	Lys	Phe	Asp	Val	Lys	Lys	Thr	Ile	Ile	Val	His	Pro	Asn	Tyr
				85					90					95	
Asn	Pro	Asp	Thr	Leu	Asp	Asn	Gly	Ala	Tyr	Asp	Asn	Asp	Ile	Ala	Leu
			100					105					110		
Leu	Lys	Leu	Lys	Ser	Pro	Gly	Val	Thr	Leu	Gly	Asp	Thr	Val	Arg	Pro
		115					120					125			
Ile	Cys	Leu	Pro	Ser	Ala	Ser	Ser	Asp	Leu	Pro	Val	Gly	Thr	Thr	Cys
	130					135						140			
Thr	Val	Ser	Gly	Trp	Gly	Arg	Arg	Pro	Thr	Lys	Asn	Leu	Gly	Leu	Ser
145					150					155					160
Asp	Thr	Leu	Gln	Glu	Val	Val	Val	Pro	Val	Val	Ser	Arg	Glu	Thr	Cys
				165					170					175	
Arg	Ser	Ala	Tyr	Glu	Tyr	Gly	Gly	Thr	Asp	Asp	Lys	Val	Glu	Phe	Val
			180					185					190		
Thr	Asp	Asn	Met	Ile	Cys	Ala	Gly	Ala	Leu	Gly	Gly	Lys	Asp	Ala	Cys
		195					200					205			
Gln	Gly	Asp	Ser	Gly	Gly	Pro	Leu	Val	Cys	Ser	Asp	Gly	Asn	Arg	Asp
	210					215						220			
Gly	Arg	Trp	Glu	Leu	Val	Gly	Ile	Val	Ser	Trp	Gly	Ser	Tyr	Gly	Cys
225					230					235					240
Ala	Arg	Gly	Asn	Lys	Pro	Gly	Val	Tyr	Thr	Arg	Val	Ser	Ser	Tyr	Leu
				245					250					255	

Asp Trp Ile

<210> 101
 <211> 312
 <212> PRT
 <213> Homo sapiens

<400> 101

Met	Arg	Met	Leu	Leu	Ala	Leu	Leu	Ala	Leu	Ser	Ala	Ala	Arg	Pro	Ser
1			5						10					15	
Ala	Ser	Ala	Glu	Ser	His	Trp	Cys	Tyr	Glu	Val	Gln	Ala	Glu	Ser	Ser
			20					25					30		
Asn	Tyr	Pro	Cys	Leu	Val	Pro	Val	Lys	Trp	Gly	Gly	Asn	Cys	Gln	Lys
		35					40					45			
Asp	Arg	Gln	Ser	Pro	Ile	Asn	Ile	Val	Thr	Thr	Lys	Ala	Lys	Val	Asp
	50					55					60				
Lys	Lys	Leu	Gly	Arg	Phe	Phe	Phe	Ser	Gly	Tyr	Asp	Lys	Lys	Gln	Thr
65					70					75					80
Trp	Thr	Val	Gln	Asn	Asn	Gly	His	Ser	Val	Met	Met	Leu	Leu	Glu	Asn
				85					90					95	
Lys	Ala	Ser	Ile	Ser	Gly	Gly	Gly	Leu	Pro	Ala	Pro	Tyr	Gln	Ala	Lys
			100					105					110		
Gln	Leu	His	Leu	His	Trp	Ser	Asp	Leu	Pro	Tyr	Lys	Gly	Ser	Glu	His
		115					120					125			
Ser	Leu	Asp	Gly	Glu	His	Phe	Ala	Met	Glu	Met	His	Ile	Val	His	Glu
	130					135						140			
Lys	Glu	Lys	Gly	Thr	Ser	Arg	Asn	Val	Lys	Glu	Ala	Gln	Asp	Pro	Glu
145					150					155					160
Asp	Glu	Ile	Ala	Val	Leu	Ala	Phe	Leu	Val	Glu	Ala	Gly	Thr	Gln	Val
				165					170					175	
Asn	Glu	Gly	Phe	Gln	Pro	Leu	Val	Glu	Ala	Leu	Ser	Asn	Ile	Pro	Lys
			180					185					190		
Pro	Glu	Met	Ser	Thr	Thr	Met	Ala	Glu	Ser	Ser	Leu	Leu	Asp	Leu	Leu
		195					200						205		
Pro	Lys	Glu	Glu	Lys	Leu	Arg	His	Tyr	Phe	Arg	Tyr	Leu	Gly	Ser	Leu
	210					215						220			
Thr	Thr	Pro	Thr	Cys	Asp	Glu	Lys	Val	Val	Trp	Thr	Val	Phe	Arg	Glu
225					230					235					240
Pro	Ile	Gln	Leu	His	Arg	Glu	Gln	Ile	Leu	Ala	Phe	Ser	Gln	Lys	Leu
				245					250					255	
Tyr	Tyr	Asp	Lys	Glu	Gln	Thr	Val	Ser	Met	Lys	Asp	Asn	Val	Arg	Pro
			260					265						270	

Leu Gln Gln Leu Gly Gln Arg Thr Val Ile Lys Ser Gly Ala Pro Gly
275 280 285

Arg Pro Leu Pro Trp Ala Leu Pro Ala Leu Leu Gly Pro Met Leu Ala
290 295 300

Cys Leu Leu Ala Gly Phe Leu Arg
305 310

<210> 102

<211> 312

<212> PRT

<213> Bos taurus

<400> 102

Met Arg Leu Leu Leu Ala Leu Leu Val Leu Ala Ala Ala Pro Pro Gln
1 5 10 15

Ala Arg Ala Ala Ser His Trp Cys Tyr Gln Ile Gln Val Lys Pro Ser
20 25 30

Asn Tyr Thr Cys Leu Glu Pro Asp Glu Trp Glu Gly Ser Cys Gln Asn
35 40 45

Asn Arg Gln Ser Pro Val Asn Ile Val Thr Ala Lys Thr Gln Leu Asp
50 55 60

Pro Asn Leu Gly Arg Phe Ser Phe Ser Gly Tyr Asn Met Lys His Gln
65 70 75 80

Trp Val Val Gln Asn Asn Gly His Thr Val Met Val Leu Leu Glu Asn
85 90 95

Lys Pro Ser Ile Ala Gly Gly Gly Leu Ser Thr Arg Tyr Gln Ala Thr
100 105 110

Gln Leu His Leu His Trp Ser Arg Ala Met Asp Arg Gly Ser Glu His
115 120 125

Ser Phe Asp Gly Glu Arg Phe Ala Met Glu Met His Ile Val His Glu
130 135 140

Lys Glu Lys Gly Leu Ser Gly Asn Ala Ser Gln Asn Gln Phe Ala Glu
145 150 155 160

Asp Glu Ile Ala Val Leu Ala Phe Met Val Glu Asp Gly Ser Lys Asn
165 170 175

Val Asn Phe Gln Pro Leu Val Glu Ala Leu Ser Asp Ile Pro Arg Pro
180 185 190

Asn Met Asn Thr Thr Met Lys Glu Gly Val Ser Leu Phe Asp Leu Leu
195 200 205

Pro Glu Glu Glu Ser Leu Arg His Tyr Phe Arg Tyr Leu Gly Ser Leu
210 215 220

Thr Thr Pro Thr Cys Asp Glu Lys Val Val Trp Thr Val Phe Gln Lys
 135 230 235 240

Pro Ile Gln Leu His Arg Asp Gln Ile Leu Ala Phe Ser Gln Lys Leu
 245 250 255

Phe Tyr Asp Asp Gln Gln Lys Val Asn Met Thr Asp Asn Val Arg Pro
 260 265 270

Val Gln Ser Leu Gly Gln Arg Gln Val Phe Arg Ser Gly Ala Pro Gly
 275 280 285

Leu Leu Leu Ala Gln Pro Leu Pro Thr Leu Leu Ala Pro Val Leu Ala
 290 295 300

Cys Leu Thr Val Gly Phe Leu Arg
 305 310

<210> 103

<211> 308

<212> PRT

<213> Oryctolagus cuniculus

<400> 103

Met Gln Leu Leu Phe Ala Leu Leu Ala Leu Gly Ala Leu Arg Pro Leu
 1 5 10 15

Ala Gly Glu Glu Leu His Trp Cys Tyr Glu Ile Gln Ala Ser Asn Tyr
 20 25 30

Ser Cys Leu Gly Pro Asp Lys Trp Gln Glu Asp Cys Gln Lys Ser Arg
 35 40 45

Gln Ser Pro Ile Asn Ile Val Thr Thr Lys Ala Glu Val Asp His Ser
 50 55 60

Leu Gly Arg Phe His Phe Ser Gly Tyr Asp Gln Arg Glu Ala Arg Leu
 65 70 75 80

Val Glu Asn Asn Gly His Ser Val Met Val Ser Leu Gly Asp Glu Ile
 85 90 95

Ser Ile Ser Gly Gly Gly Leu Pro Ala Arg Tyr Arg Ala Thr Gln Leu
 100 105 110

His Leu His Trp Ser Gln Glu Leu Asp Arg Gly Ser Glu His Ser Leu
 115 120 125

Asp Gly Glu Arg Ser Ala Met Glu Met His Ile Val His Gln Lys Glu
 130 135 140

Thr Gly Thr Ser Gly Asn Glu Val Gln Asp Ser Asp Asp Ser Ile Ala
 145 150 155 160

Val Leu Ala Phe Leu Val Glu Ala Gly Pro Thr Met Asn Glu Gly Phe

165 170 175
 Gln Pro Leu Val Thr Ala Leu Ser Ala Ile Ser Ile Pro Gly Thr Asn
 180 185 190
 Thr Thr Met Ala Pro Ser Ser Leu Trp Asp Leu Leu Pro Ala Glu Glu
 195 200 205
 Glu Leu Arg His Tyr Phe Arg Tyr Met Gly Ser Leu Thr Thr Pro Ala
 210 215 220
 Cys Ser Glu Thr Val Val Trp Thr Val Phe Gln Glu Pro Ile Arg Leu
 225 230 235
 His Arg Asp Gln Ile Leu Glu Phe Ser Ser Lys Leu Tyr Tyr Asp Gln
 245 250 255
 Glu Arg Lys Met Asn Met Lys Asp Asn Val Arg Pro Leu Gln Arg Leu
 260 265 270
 Gly Asp Arg Ser Val Phe Lys Ser Gln Ala Ala Gly Gln Leu Leu Pro
 275 280 285
 Leu Pro Leu Pro Thr Leu Leu Val Pro Thr Leu Ala Cys Val Met Ala
 290 295 300
 Gly Leu Leu Arg
 305

<210> 104
 <211> 309
 <212> PRT
 <213> Rattus norvegicus

<400> 104
 Met Gln Leu Leu Leu Ala Leu Leu Ala Leu Ala Tyr Val Ala Pro Ser
 1 5 10 15
 Thr Glu Asp Ser His Trp Cys Tyr Glu Ile Gln Ala Lys Glu Pro Asn
 20 25 30
 Ser His Cys Ser Gly Pro Glu Gln Trp Thr Gly Asp Cys Lys Lys Asn
 35 40 45
 Gln Gln Ser Pro Ile Asn Ile Val Thr Ser Lys Thr Lys Leu Asn Pro
 50 55 60
 Ser Leu Thr Pro Phe Thr Phe Val Gly Tyr Asp Gln Lys Lys Lys Trp
 65 70 75 80
 Glu Val Lys Asn Asn Gln His Ser Val Glu Met Ser Leu Gly Glu Asp
 85 90 95
 Ile Tyr Ile Phe Gly Gly Asp Leu Pro Thr Gln Tyr Lys Ala Ile Gln
 100 105 110

Leu His Leu His Trp Ser Glu Glu Ser Asn Lys Gly Ser Glu His Ser
115 120 125

Ile Asp Gly Lys His Phe Ala Met Glu Met His Val Val His Lys Lys
130 135 140

Met Thr Thr Gly Asp Lys Val Gln Asp Ser Asp Ser Lys Asp Lys Ile
145 150 155 160

Ala Val Leu Ala Phe Met Val Glu Val Glv Asn Glu Val Asn Glu Glv
165 170 175

Phe Gln Pro Leu Val Glu Ala Leu Ser Arg Leu Ser Lys Pro Phe Thr
180 185 190

Asn Ser Thr Val Ser Glu Ser Cys Leu Gln Asp Met Leu Pro Glu Lys
195 200 205

Lys Lys Leu Ser Ala Tyr Phe Arg Tyr Gln Gly Ser Leu Thr Thr Pro
210 215 220

Gly Cys Asp Glu Thr Val Ile Trp Thr Val Phe Glu Glu Pro Ile Lys
225 230 235 240

Ile His Lys Asp Gln Phe Leu Glu Phe Ser Lys Lys Leu Tyr Tyr Asp
245 250 255

Gln Glu Gln Lys Leu Asn Met Lys Asp Asn Val Arg Pro Leu Gln Pro
260 265 270

Leu Gly Asn Arg Gln Val Phe Arg Ser His Ala Ser Gly Arg Leu Leu
275 280 285

Ser Leu Pro Leu Pro Thr Leu Leu Val Pro Thr Leu Thr Cys Leu Val
290 295 300

Ala Ser Phe Leu His
305

<210> 105
<211> 305
<212> PRT
<213> Mus musculus

<400> 105
Met Gln Leu Leu Leu Ala Leu Leu Ala Leu Ala Tyr Val Ala Pro Ser
1 5 10 15

Thr Glu Asp Ser Gly Trp Cys Tyr Glu Ile Gln Thr Lys Asp Pro Arg
20 25 30

Ser Ser Cys Leu Gly Pro Glu Lys Trp Pro Gly Ala Cys Lys Glu Asn
35 40 45

Gln Gln Ser Pro Ile Asn Ile Val Thr Ala Arg Thr Lys Val Asn Pro
50 55 60

Arg Leu Thr Pro Phe Ile Leu Val Gly Tyr Asp Gln Lys Gln Gln Trp
65 70 75 80

Pro Ile Lys Asn Asn Gln His Thr Val Glu Met Thr Leu Gly Gly Gly
85 90 95

Ala Cys Ile Ile Gly Gly Asp Leu Pro Ala Arg Tyr Glu Ala Val Gln
100 105 110

Leu His Leu His Trp Ser Asn Gly Asn Asp Asn Gly Ser Glu His Ser
115 120 125

Ile Asp Gly Arg His Phe Ala Met Glu Met His Ile Val His Lys Lys
130 135 140

Leu Thr Ser Ser Lys Glu Asp Ser Lys Asp Lys Phe Ala Val Leu Ala
145 150 155 160

Phe Met Ile Glu Val Gly Asp Lys Val Asn Lys Gly Phe Gln Pro Leu
165 170 175

Val Glu Ala Leu Pro Ser Ile Ser Lys Pro His Ser Thr Ser Thr Val
180 185 190

Arg Glu Ser Ser Leu Gln Asp Met Leu Pro Pro Ser Thr Lys Met Tyr
195 200 205

Thr Tyr Phe Arg Tyr Asn Gly Ser Leu Thr Thr Pro Asn Cys Asp Glu
210 215 220

Thr Val Ile Trp Thr Val Tyr Lys Gln Pro Ile Lys Ile His Lys Asn
225 230 235 240

Gln Phe Leu Glu Phe Ser Lys Asn Leu Tyr Tyr Asp Glu Asp Gln Lys
245 250 255

Leu Asn Met Lys Asp Asn Val Arg Pro Leu Gln Pro Leu Gly Lys Arg
260 265 270

Gln Val Phe Lys Ser His Ala Pro Gly Gln Leu Leu Ser Leu Pro Leu
275 280 285

Pro Thr Leu Leu Val Pro Thr Leu Thr Cys Leu Val Ala Asn Phe Leu
290 295 300

Gln
305

<210> 106
<211> 170
<212> PRT
<213> Homo sapiens

<400> 106
Trp Gly Tyr Gly Glu His Asn Gly Pro Glu His Ser Asn Asn Ala His

1	5	10	15
Val Leu Trp His Lys Leu Tyr Pro Ile Ala Asn Gly Gly Asn Cys Gln	20	25	30
Gly Glu Arg Gln Ser Pro Ile Asn Ile Gln Thr Lys Glu Ala Lys Tyr	35	40	45
Asp Pro Ser Leu Lys Pro Leu Ser Leu Ser Tyr Asp Ala Ala Thr Ala	50	55	60
Lys Glu Phe Glu Ile Val Asn Asn Gly His Ser Phe Gln Val Glu Phe	65	70	75
Asp Asp Ser Asp Asp Lys Ser Val Leu Ser Gly Gly Pro Leu Pro Ala	85	90	95
Gly His Pro Tyr Arg Leu Lys Gln Phe His Phe His Trp Gly Gly Ala	100	105	110
Ser Ser Asp Asp Gln Gly Ser Glu His Thr Val Asp Gly Lys Lys Tyr	115	120	125
Ala Ala Glu Leu His Leu Val His Trp Asn Ser Thr Lys Tyr Gly Ser	130	135	140
Tyr Lys Glu Ala Val Ser Lys Pro Asp Gly Leu Ala Val Leu Gly Val	145	150	155
Phe Leu Lys Val Gly Asp Tyr Gln Glu Asn	165	170	

<210> 107
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 107
Lys Val Gly Asp Tyr Gln Glu Asn Pro Gly Leu Gln Lys Val Val Asp
1 5 10 15
Ala Leu Ser Ser Ile Lys Thr Lys Gly Lys Ser Ala Thr Phe Thr Asn
20 25 30
Phe Asp Pro Ser Thr Leu Leu Pro Ser Glu Lys Leu Arg Asp Tyr Trp
35 40 45
Thr Tyr Pro Gly Ser Leu Thr Thr Pro Pro Leu Thr Glu Ser Val Thr
50 55 60
Trp Ile Val Leu Lys Glu Pro Ile Ser Val Ser Ser Glu Gln Leu Leu
65 70 75 80
Lys Phe Arg Ser Leu Leu Phe Asn Ala Glu Gly Glu Glu Val Pro
85 90 95

Gly Cys Asp Gly Ile Met Val Asp Asn Tyr Arg Pro Thr Gln Pro Leu
 100 105 110

Lys Gly Arg Val Val Arg Ala Ser Phe
 115 120

<210> 108
 <211> 779
 <212> PRT
 <213> Homo sapiens

<400> 108
 Gly Met Lys Pro Phe Gln Leu Asp Leu Leu Phe Val Cys Phe Phe Leu
 1 5 10 15

Phe Ser Gln Glu Leu Gly Leu Gln Lys Arg Gly Cys Cys Leu Val Leu
 20 25 30

Gly Tyr Met Ala Lys Asp Lys Phe Arg Arg Met Asn Glu Gly Gln Val
 35 40 45

Tyr Ser Phe Ser Gln Gln Pro Gln Asp Gln Val Val Val Ser Gly Gln
 50 55 60

Pro Val Thr Leu Leu Cys Ala Ile Pro Glu Tyr Asp Gly Phe Val Leu
 65 70 75 80

Trp Ile Lys Asp Gly Leu Ala Leu Gly Val Gly Arg Asp Leu Ser Ser
 85 90 95

Tyr Pro Gln Tyr Leu Val Val Gly Asn His Leu Ser Gly Glu His His
 100 105 110

Leu Lys Ile Leu Arg Ala Glu Leu Gln Asp Asp Ala Val Tyr Glu Cys
 115 120 125

Gln Ala Ile Gln Ala Ala Ile Arg Ser Arg Pro Ala Arg Leu Thr Val
 130 135 140

Leu Val Pro Pro Asp Asp Pro Val Ile Leu Gly Gly Pro Val Ile Ser
 145 150 155 160

Leu Arg Ala Gly Asp Pro Leu Asn Leu Thr Cys His Ala Asp Asn Ala
 165 170 175

Lys Pro Ala Ala Ser Ile Ile Trp Leu Arg Lys Gly Glu Val Ile Asn
 180 185 190

Gly Ala Thr Tyr Ser Lys Thr Leu Leu Arg Asp Gly Lys Arg Glu Ser
 195 200 205

Ile Val Ser Thr Leu Phe Ile Ser Pro Gly Asp Val Glu Asn Gly Gln
 210 215 220

Ser Ile Val Cys Arg Ala Thr Asn Lys Ala Ile Pro Gly Gly Lys Glu
 225 230 235 240

Thr Ser Val Thr Ile Asp Ile Gln His Pro Pro Leu Val Asn Leu Ser
 245 250 255
 Val Glu Pro Gln Pro Val Leu Glu Asp Asn Val Val Thr Phe His Cys
 260 265 270
 Ser Ala Lys Ala Asn Pro Ala Val Thr Gln Tyr Arg Trp Ala Lys Arg
 275 280 285
 Gly Gln Ile Ile Lys Glu Ala Ser Gly Glu Val Tyr Arg Thr Thr Val
 290 295 300
 Asp Tyr Thr Tyr Phe Ser Glu Pro Val Ser Cys Glu Val Thr Asn Ala
 305 310 315 320
 Leu Gly Ser Thr Asn Leu Ser Arg Thr Val Asp Val Tyr Phe Gly Pro
 325 330 335
 Arg Met Thr Thr Glu Pro Gln Ser Leu Leu Val Asp Leu Gly Ser Asp
 340 345 350
 Ala Ile Phe Ser Cys Ala Trp Thr Gly Asn Pro Ser Leu Thr Ile Val
 355 360 365
 Trp Met Lys Arg Gly Ser Gly Val Val Leu Ser Asn Glu Lys Thr Leu
 370 375 380
 Thr Leu Lys Ser Val Arg Gln Glu Asp Ala Gly Lys Tyr Val Cys Arg
 385 390 395 400
 Ala Val Val Pro Arg Val Gly Ala Gly Glu Arg Glu Val Thr Leu Thr
 405 410 415
 Val Asn Gly Pro Pro Ile Ile Ser Ser Thr Gln Thr Gln His Ala Leu
 420 425 430
 His Gly Glu Lys Gly Gln Ile Lys Cys Phe Ile Arg Ser Thr Pro Pro
 435 440 445
 Pro Asp Arg Ile Ala Trp Ser Trp Lys Glu Asn Val Leu Glu Ser Gly
 450 455 460
 Thr Ser Gly Arg Tyr Thr Val Glu Thr Ile Ser Thr Glu Glu Gly Val
 465 470 475 480
 Ile Ser Thr Leu Thr Ile Ser Asn Ile Val Arg Ala Asp Phe Gln Thr
 485 490 495
 Ile Tyr Asn Cys Thr Ala Trp Asn Ser Phe Gly Ser Asp Thr Glu Ile
 500 505 510
 Ile Arg Leu Lys Glu Gln Gly Ser Glu Met Lys Ser Gly Ala Gly Leu
 515 520 525
 Glu Ala Glu Ser Val Pro Met Ala Val Ile Ile Gly Val Ala Val Gly
 530 535 540

Ala Gly Val Ala Phe Leu Val Leu Met Ala Thr Ile Val Ala Phe Cys
515 550 555 560

Cys Ala Arg Ser Gln Arg Asn Leu Lys Gly Val Val Ser Ala Lys Asn
565 570 575

Asp Ile Arg Val Glu Ile Val His Lys Glu Pro Ala Ser Gly Arg Glu
580 585 590

Gly Glu Glu His Ser Thr Ile Lys Gln Leu Met Met Asp Arg Gly Glu
595 600 605

Phe Gln Gln Asp Ser Val Leu Lys Gln Leu Glu Val Leu Lys Glu Glu
610 615 620

Glu Lys Glu Phe Gln Asn Leu Lys Asp Pro Thr Asn Gly Tyr Tyr Ser
625 630 635 640

Val Asn Thr Phe Lys Glu His His Ser Thr Pro Thr Ile Ser Leu Ser
645 650 655

Ser Cys Gln Pro Asp Leu Arg Pro Ala Gly Lys Gln Arg Val Pro Thr
660 665 670

Gly Met Ser Phe Thr Asn Ile Tyr Ser Thr Leu Ser Gly Gln Gly Arg
675 680 685

Leu Tyr Asp Tyr Gly Gln Arg Phe Val Leu Gly Met Gly Ser Ser Ser
690 695 700

Ile Glu Leu Cys Glu Arg Glu Phe Gln Arg Gly Ser Leu Ser Asp Ser
705 710 715 720

Ser Ser Phe Leu Asp Thr Gln Cys Asp Ser Ser Val Ser Ser Ser Gly
725 730 735

Lys Gln Asp Gly Tyr Val Gln Phe Asp Lys Ala Ser Lys Ala Ser Ala
740 745 750

Ser Ser Ser His His Ser Gln Ser Ser Ser Gln Asn Ser Asp Pro Ser
755 760 765

Arg Pro Leu Gln Arg Arg Met Gln Thr His Val
770 775

<210> 109

<211> 571

<212> PRT

<213> Homo sapiens

<400> 109

Met Asn Glu Ala Ile Pro Ser Gly Lys Glu Thr Ser Ile Glu Leu Asp
1 5 10 15

Val His His Pro Pro Thr Val Thr Leu Ser Ile Glu Pro Gln Thr Val

20 25 30
 Gln Glu Gly Glu Arg Val Val Phe Thr Lys Gln Ala Thr Ala Asn Pro
 35 40 45
 Glu Ile Leu Gly Tyr Arg Trp Ala Lys Gly Gly Phe Leu Ile Glu Asp
 50 55 60
 Ala His Glu Ser Arg Tyr Glu Thr Asn Val Asp Tyr Ser Phe Phe Thr
 65 70 75 80
 Glu Pro Val Ser Cys Glu Val His Asn Lys Val Gly Ser Thr Asn Val
 85 90 95
 Ser Thr Leu Val Asn Val His Phe Ala Pro Arg Ile Val Val Asp Pro
 100 105 110
 Lys Pro Thr Thr Thr Asp Ile Gly Ser Asp Val Thr Leu Thr Cys Val
 115 120 125
 Trp Val Gly Asn Pro Pro Leu Thr Leu Thr Trp Thr Lys Lys Asp Ser
 130 135 140
 Asn Met Gly Pro Arg Pro Pro Gly Ser Pro Pro Glu Ala Ala Leu Ser
 145 150 155 160
 Ala Gln Val Leu Ser Asn Ser Asn Gln Leu Leu Leu Lys Ser Val Thr
 165 170 175
 Gln Ala Asp Ala Gly Thr Tyr Thr Cys Arg Ala Ile Val Pro Arg Ile
 180 185 190
 Gly Val Ala Glu Arg Glu Val Pro Leu Tyr Val Asn Gly Pro Pro Ile
 195 200 205
 Ile Ser Ser Glu Ala Val Gln Tyr Ala Val Arg Gly Asp Gly Gly Lys
 210 215 220
 Val Glu Cys Phe Ile Gly Ser Thr Pro Pro Pro Asp Arg Ile Ala Trp
 225 230 235 240
 Ala Trp Lys Glu Asn Phe Leu Glu Val Gly Thr Leu Glu Arg Tyr Thr
 245 250 255
 Val Glu Arg Thr Asn Ser Gly Ser Gly Val Leu Ser Thr Leu Thr Ile
 260 265 270
 Asn Asn Val Met Glu Ala Asp Phe Gln Thr His Tyr Asn Cys Thr Ala
 275 280 285
 Trp Asn Ser Phe Gly Pro Gly Thr Ala Ile Ile Gln Leu Glu Glu Arg
 290 295 300
 Glu Val Leu Pro Val Gly Ile Ile Ala Gly Ala Thr Ile Gly Ala Ser
 305 310 315 320
 Ile Leu Leu Ile Phe Phe Phe Ile Ala Leu Val Phe Phe Leu Tyr Arg

325										330										335									
Arg	Arg	Lys	Gly	Ser	Arg	Lys	Asp	Val	Thr	Leu	Arg	Lys	Leu	Asp	Ile														
			340						345						350														
Lys	Val	Glu	Thr	Val	Asn	Arg	Glu	Pro	Leu	Thr	Met	His	Ser	Asp	Arg														
		355					360							365															
Glu	Asp	Asp	Thr	Ala	Ser	Val	Ser	Thr	Ala	Thr	Arg	Val	Met	Lys	Ala														
	370					375							380																
Ile	Tyr	Ser	Ser	Phe	Lys	Asp	Asp	Val	Asp	Leu	Lys	Gln	Asp	Leu	Arg														
385					390							395			400														
Cys	Asp	Thr	Ile	Asp	Thr	Arg	Glu	Glu	Tyr	Glu	Met	Lys	Asp	Pro	Thr														
			405						410					415															
Asn	Gly	Tyr	Tyr	Asn	Val	Arg	Ala	His	Glu	Asp	Arg	Pro	Ser	Ser	Arg														
			420				425						430																
Ala	Val	Leu	Tyr	Ala	Asp	Tyr	Arg	Ala	Pro	Gly	Pro	Ala	Arg	Phe	Asp														
		435					440					445																	
Gly	Arg	Pro	Ser	Ser	Arg	Leu	Ser	His	Ser	Ser	Gly	Tyr	Ala	Gln	Leu														
	450					455						460																	
Asn	Thr	Tyr	Ser	Arg	Gly	Pro	Ala	Ser	Asp	Tyr	Gly	Pro	Glu	Pro	Thr														
465					470							475			480														
Pro	Pro	Gly	Pro	Ala	Ala	Pro	Ala	Gly	Thr	Asp	Thr	Thr	Ser	Gln	Leu														
				485					490					495															
Ser	Tyr	Glu	Asn	Tyr	Glu	Lys	Phe	Asn	Ser	His	Pro	Phe	Pro	Gly	Ala														
			500					505					510																
Ala	Gly	Tyr	Pro	Thr	Tyr	Arg	Leu	Gly	Tyr	Pro	Gln	Ala	Pro	Pro	Ser														
		515					520					525																	
Gly	Leu	Glu	Arg	Thr	Pro	Tyr	Glu	Ala	Tyr	Asp	Pro	Ile	Gly	Lys	Tyr														
	530					535						540																	
Ala	Thr	Ala	Thr	Arg	Phe	Ser	Tyr	Thr	Ser	Gln	His	Ser	Asp	Tyr	Gly														
545					550						555				560														
Gln	Arg	Phe	Gln	Gln	Arg	Met	Gln	Thr	His	Val																			
				565					570																				

<210> 110
 <211> 605
 <212> PRT
 <213> Homo sapiens

<400> 110
 Met Leu Ser Leu Leu Val Trp Ile Leu Thr Leu Ser Asp Thr Phe Ser
 1 5 10 15

Gln Gly Thr Gln Thr Arg Phe Ser Gln Glu Pro Ala Asp Gln Thr Val
 20 25 30
 Val Ala Gly Gln Arg Ala Val Leu Pro Cys Val Leu Leu Asn Tyr Ser
 35 40 45
 Gly Ile Val Gln Trp Thr Lys Asp Gly Leu Ala Leu Gly Met Gly Gln
 50 55 60
 Glv Leu Lys Ala Tro Pro Arg Tyr Arg Val Val Glv Ser Ala Asp Ala
 65 70 75 80
 Gly Gln Tyr Asn Leu Glu Ile Thr Asp Ala Glu Leu Ser Asp Asp Ala
 85 90 95
 Ser Tyr Glu Cys Gln Ala Thr Glu Ala Ala Leu Arg Ser Arg Arg Ala
 100 105 110
 Lys Leu Thr Val Leu Ile Pro Pro Glu Asp Thr Arg Ile Asp Gly Gly
 115 120 125
 Pro Val Ile Leu Leu Gln Ala Gly Thr Pro His Asn Leu Thr Cys Arg
 130 135 140
 Ala Phe Asn Ala Lys Pro Ala Ala Thr Ile Ile Trp Phe Arg Asp Gly
 145 150 155 160
 Thr Gln Gln Glu Gly Ala Val Ala Ser Thr Glu Leu Leu Lys Asp Gly
 165 170 175
 Lys Arg Glu Thr Thr Val Ser Gln Leu Ile Asn Pro Thr Asp Leu
 180 185 190
 Asp Ile Gly Arg Val Phe Thr Cys Arg Ser Met Asn Glu Ala Ile Pro
 195 200 205
 Ser Gly Lys Glu Thr Ser Ile Glu Leu Asp Val His His Pro Pro Thr
 210 215 220
 Val Thr Leu Ser Ile Glu Pro Gln Thr Val Gln Glu Gly Glu Arg Val
 225 230 235 240
 Val Phe Thr Cys Gln Ala Thr Ala Asn Pro Glu Ile Leu Gly Tyr Arg
 245 250 255
 Trp Ala Lys Gly Gly Phe Leu Ile Glu Asp Ala His Glu Ser Arg Tyr
 260 265 270
 Glu Thr Asn Val Asp Tyr Ser Phe Phe Thr Glu Pro Val Ser Cys Glu
 275 280 285
 Val His Asn Lys Val Gly Ser Thr Asn Val Ser Thr Leu Val Asn Val
 290 295 300
 His Phe Ala Pro Arg Ile Val Val Asp Pro Lys Pro Thr Thr Thr Asp
 305 310 315 320

Ile Gly Ser Asp Val Thr Leu Thr Cys Val Trp Val Gly Asn Pro Pro
 325 330 335
 Leu Thr Leu Thr Trp Thr Lys Lys Asp Ser Asn Met Val Leu Ser Asn
 340 345 350
 Ser Asn Gln Leu Leu Leu Lys Ser Val Thr Gln Ala Asp Ala Gly Thr
 355 360 365
 Tyr Thr Cys Arg Ala Ile Val Pro Arg Ile Gly Val Ala Glu Arg Glu
 370 375 380
 Val Pro Leu Tyr Val Asn Gly Pro Pro Ile Ile Ser Ser Glu Ala Val
 385 390 395 400
 Gln Tyr Ala Val Arg Gly Asp Gly Gly Lys Val Glu Cys Phe Ile Gly
 405 410 415
 Ser Thr Pro Pro Pro Asp Arg Ile Ala Trp Ala Trp Lys Glu Asn Phe
 420 425 430
 Leu Glu Val Gly Thr Leu Glu Arg Tyr Thr Val Glu Arg Thr Asn Ser
 435 440 445
 Gly Ser Gly Val Leu Ser Thr Leu Thr Ile Asn Asn Val Met Glu Ala
 450 455 460
 Asp Phe Gln Thr His Tyr Asn Cys Thr Ala Trp Asn Ser Phe Gly Pro
 465 470 475 480
 Gly Thr Ala Ile Ile Gln Leu Glu Glu Arg Glu Val Leu Pro Val Gly
 485 490 495
 Ile Ile Ala Gly Ala Thr Ile Gly Ala Ser Ile Leu Leu Ile Phe Phe
 500 505 510
 Phe Ile Ala Leu Val Phe Phe Leu Tyr Arg Arg Arg Lys Gly Ser Arg
 515 520 525
 Lys Asp Val Thr Leu Arg Lys Leu Asp Ile Lys Val Glu Thr Val Asn
 530 535 540
 Arg Glu Pro Leu Thr Met His Ser Asp Arg Glu Asp Asp Thr Ala Ser
 545 550 555 560
 Val Ser Thr Ala Thr Arg Val Met Lys Ala Ile Tyr Ser Ser Phe Lys
 565 570 575
 Asp Asp Val Asp Leu Lys Gln Asp Leu Arg Cys Asp Thr Ile Glu Arg
 580 585 590
 Pro Arg Ile Arg Gly Arg Leu Asn Thr Ser Tyr Ser Asp
 595 600 605

<210> 111
 <211> 410

1. *U. m. m. m.* 2. *U. m. m. m.* 3. *U. m. m. m.* 4. *U. m. m. m.* 5. *U. m. m. m.* 6. *U. m. m. m.* 7. *U. m. m. m.* 8. *U. m. m. m.* 9. *U. m. m. m.* 10. *U. m. m. m.* 11. *U. m. m. m.* 12. *U. m. m. m.* 13. *U. m. m. m.* 14. *U. m. m. m.* 15. *U. m. m. m.* 16. *U. m. m. m.* 17. *U. m. m. m.* 18. *U. m. m. m.* 19. *U. m. m. m.* 20. *U. m. m. m.* 21. *U. m. m. m.* 22. *U. m. m. m.* 23. *U. m. m. m.* 24. *U. m. m. m.* 25. *U. m. m. m.* 26. *U. m. m. m.* 27. *U. m. m. m.* 28. *U. m. m. m.* 29. *U. m. m. m.* 30. *U. m. m. m.* 31. *U. m. m. m.* 32. *U. m. m. m.* 33. *U. m. m. m.* 34. *U. m. m. m.* 35. *U. m. m. m.* 36. *U. m. m. m.* 37. *U. m. m. m.* 38. *U. m. m. m.* 39. *U. m. m. m.* 40. *U. m. m. m.* 41. *U. m. m. m.* 42. *U. m. m. m.* 43. *U. m. m. m.* 44. *U. m. m. m.* 45. *U. m. m. m.* 46. *U. m. m. m.* 47. *U. m. m. m.* 48. *U. m. m. m.* 49. *U. m. m. m.* 50. *U. m. m. m.* 51. *U. m. m. m.* 52. *U. m. m. m.* 53. *U. m. m. m.* 54. *U. m. m. m.* 55. *U. m. m. m.* 56. *U. m. m. m.* 57. *U. m. m. m.* 58. *U. m. m. m.* 59. *U. m. m. m.* 60. *U. m. m. m.* 61. *U. m. m. m.* 62. *U. m. m. m.* 63. *U. m. m. m.* 64. *U. m. m. m.* 65. *U. m. m. m.* 66. *U. m. m. m.* 67. *U. m. m. m.* 68. *U. m. m. m.* 69. *U. m. m. m.* 70. *U. m. m. m.* 71. *U. m. m. m.* 72. *U. m. m. m.* 73. *U. m. m. m.* 74. *U. m. m. m.* 75. *U. m. m. m.* 76. *U. m. m. m.* 77. *U. m. m. m.* 78. *U. m. m. m.* 79. *U. m. m. m.* 80. *U. m. m. m.* 81. *U. m. m. m.* 82. *U. m. m. m.* 83. *U. m. m. m.* 84. *U. m. m. m.* 85. *U. m. m. m.* 86. *U. m. m. m.* 87. *U. m. m. m.* 88. *U. m. m. m.* 89. *U. m. m. m.* 90. *U. m. m. m.* 91. *U. m. m. m.* 92. *U. m. m. m.* 93. *U. m. m. m.* 94. *U. m. m. m.* 95. *U. m. m. m.* 96. *U. m. m. m.* 97. *U. m. m. m.* 98. *U. m. m. m.* 99. *U. m. m. m.* 100. *U. m. m. m.*

Met Val Leu Ser Asn Ser Asn Gln Leu Leu Lys Ser Val Thr Gln
1 5 10 15

Val Ala Glu Arg Glu Val Pro Leu Tyr Val Asn Gly Pro Pro Ile Ile
35 40 45

Ser Ser Glu Ala Val Gln Tyr Ala Val Arg Gly Asp Gly Gly Lys Val
50 55 60

Glu Cys Phe Ile Gly Ser Thr Pro Pro Pro Asp Arg Ile Ala Trp Ala
65 70 75 80

Trp Lys Glu Asn Phe Leu Glu Val Gly Thr Leu Glu Arg Tyr Thr Val
85 90 95

Glu Arg Thr Asn Ser Gly Ser Gly Val Leu Ser Thr Leu Thr Ile Asn
100 105 110

Asn Val Met Glu Ala Asp Phe Gln Thr His Tyr Asn Cys Thr Ala Trp
115 120 125

Asn Ser Phe Gly Pro Gly Thr Ala Ile Ile Gln Leu Glu Glu Arg Glu
130 135 140

Val Leu Pro Val Gly Ile Ile Ala Gly Ala Thr Ile Gly Ala Ser Ile
145 150 155 160

Leu Leu Ile Phe Phe Phe Ile Ala Leu Val Phe Phe Leu Tyr Arg Arg
165 170 175

Arg Lys Gly Ser Arg Lys Asp Val Thr Leu Arg Lys Leu Asp Ile Lys
180 185 190

Val Glu Thr Val Asn Arg Glu Pro Leu Thr Met His Ser Asp Arg Glu
195 200 205

Asp Asp Thr Ala Ser Val Ser Thr Ala Thr Arg Val Met Lys Ala Ile
210 215 220

Tyr Ser Ser Phe Lys Asp Asp Val Asp Leu Lys Gln Asp Leu Arg Cys
225 230 235 240

Asp Thr Ile Asp Thr Arg Glu Glu Tyr Glu Met Lys Asp Pro Thr Asn
245 250 255

Gly Tyr Tyr Asn Val Arg Ala His Glu Asp Arg Pro Ser Ser Arg Ala
260 265 270

Val Leu Tyr Ala Asp Tyr Arg Ala Pro Gly Pro Ala Arg Phe Asp Gly
275 280 285

Arg Pro Ser Ser Arg Leu Ser His Ser Ser Gly Tyr Ala Gln Leu Asn
290 295 300

Thr Tyr Ser Arg Gly Pro Ala Ser Asp Tyr Gly Pro Gln Pro Thr Pro
305 310 315 320

Pro Gly Pro Ala Ala Pro Ala Gly Thr Asp Thr Thr Ser Gln Leu Ser
325 330 335

Tyr Glu Asn Tyr Glu Lys Phe Asn Ser His Pro Phe Pro Gly Ala Ala
340 345 350

Gly Tyr Pro Thr Tyr Arg Leu Gly Tyr Pro Gln Ala Pro Pro Ser Gly
355 360 365

Leu Glu Arg Thr Pro Tyr Glu Ala Tyr Asp Pro Ile Gly Lys Tyr Ala
370 375 380

Thr Ala Thr Arg Phe Ser Tyr Thr Ser Gln His Ser Asp Tyr Gly Gln
385 390 395 400

Arg Phe Gln Gln Arg Met Gln Thr His Val
405 410

<210> 112

<211> 392

<212> PRT

<213> Mus musculus

<400> 112

Met Trp Ala Pro His Leu Val Val Ala Tyr Leu Ile Phe Val Thr Leu
1 5 10 15

Ala Leu Ala Leu Pro Gly Thr Gln Thr Arg Phe Ser Gln Glu Pro Ala
20 25 30

Asp Gln Thr Val Val Ala Gly Gln Arg Ala Val Leu Pro Cys Val Leu
35 40 45

Leu Asn Tyr Ser Gly Ile Val Gln Trp Thr Lys Asp Gly Leu Ala Leu
50 55 60

Gly Met Gly Gln Gly Leu Lys Ala Trp Pro Arg Tyr Arg Val Val Gly
65 70 75 80

Ser Ala Asp Ala Gly Gln Tyr Asn Leu Glu Ile Thr Asp Ala Glu Leu
85 90 95

Ser Asp Asp Ala Ser Tyr Glu Cys Gln Ala Thr Glu Ala Ala Leu Arg
100 105 110

Ser Arg Arg Ala Lys Leu Thr Val Leu Ile Pro Pro Glu Glu Thr Arg
115 120 125

Ile Asp Gly Gly Pro Val Ile Leu Leu Gln Ala Gly Thr Pro Tyr Asn

139 135 140
 Leu Thr Cys Arg Ala Phe Asn Ala Lys Pro Ala Ala Thr Ile Ile Trp
 145 150 155 160
 Phe Arg Asp Gly Thr Gln Gln Glu Gly Ala Val Thr Ser Thr Glu Leu
 165 170 175
 Leu Lys Asp Gly Lys Arg Glu Thr Thr Ile Ser Gln Leu Leu Ile Glu
 180 185 190
 Pro Thr Asp Leu Asp Ile Gly Arg Val Phe Thr Cys Arg Ser Met Asn
 195 200 205
 Glu Ala Ile Pro Asn Gly Lys Glu Thr Ser Ile Glu Leu Asp Val His
 210 215 220
 His Pro Pro Thr Val Thr Leu Ser Ile Glu Pro Gln Thr Val Leu Glu
 225 230 235 240
 Gly Glu Arg Val Ile Phe Thr Cys Gln Ala Thr Ala Asn Pro Glu Ile
 245 250 255
 Leu Gly Tyr Arg Trp Ala Lys Gly Gly Phe Leu Ile Glu Asp Ala His
 260 265 270
 Glu Ser Arg Tyr Glu Thr Asn Val Asp Tyr Ser Phe Phe Thr Glu Pro
 275 280 285
 Val Ser Cys Glu Val Tyr Asn Lys Val Gly Ser Thr Asn Val Ser Thr
 290 295 300
 Leu Val Asn Val His Phe Ala Pro Arg Ile Val Val Tyr Pro Lys Pro
 305 310 315 320
 Thr Thr Thr Asp Ile Gly Ser Asp Val Thr Leu Thr Cys Val Trp Val
 325 330 335
 Gly Asn Pro Pro Leu Thr Leu Thr Trp Thr Lys Lys Asp Ser Asn Met
 340 345 350
 Val Leu Ser Asn Ser Asn Gln Leu Leu Leu Lys Ser Val Thr Gln Ala
 355 360 365
 Asp Ala Gly Thr Tyr Thr Ala Gly Pro Ser Cys Leu Gly Ser Glu Trp
 370 375 380
 Leu Ser Glu Arg Tyr Arg Phe Met
 385 390

<210> 113
 <211> 45
 <212> PRT
 <213> Homo sapiens

<400> 113

Gly Glu Ser Val Thr Leu Thr Cys Ser Val Ser Gly Phe Gly Pro Pro
1 5 10 15

Pro Val Thr Trp Leu Arg Asn Gly Lys Leu Ser Leu Thr Ile Ser Val
20 25 30

Thr Pro Glu Asp Ser Gly Gly Thr Tyr Thr Cys Val Val
35 40 45

<210> 114

<211> 736

<212> PRT

<213> Homo sapiens

<400> 114

Met Gly Leu Thr Glu Asp Glu Asp Val Arg Ala Met Leu Arg Gly Ser
1 5 10 15

Arg Leu Arg Lys Ile Arg Ser Arg Thr Trp His Lys Glu Arg Leu Tyr
20 25 30

Arg Leu Gln Glu Asp Gly Leu Ser Val Trp Phe Gln Arg Arg Ile Pro
35 40 45

Arg Ala Pro Ser Gln His Ile Phe Phe Val Gln His Ile Glu Ala Val
50 55 60

Arg Glu Gly His Gln Ser Glu Gly Leu Arg Arg Phe Gly Gly Ala Phe
65 70 75 80

Ala Pro Ala Arg Cys Leu Thr Ile Ala Phe Lys Gly Arg Arg Lys Asn
85 90 95

Leu Asp Leu Ala Ala Pro Thr Ala Glu Glu Ala Gln Arg Trp Val Arg
100 105 110

Gly Leu Thr Lys Leu Arg Ala Arg Leu Asp Ala Met Ser Gln Arg Glu
115 120 125

Arg Leu Asp His Trp Ile His Ser Tyr Leu His Arg Ala Asp Ser Asn
130 135 140

Gln Asp Ser Lys Met Ser Phe Lys Glu Ile Lys Ser Leu Leu Arg Met
145 150 155 160

Val Asn Val Asp Met Asn Asp Met Tyr Ala Tyr Leu Leu Phe Lys Glu
165 170 175

Cys Asp His Ser Asn Asn Asp Arg Leu Glu Gly Ala Glu Ile Glu Glu
180 185 190

Phe Leu Arg Arg Leu Leu Lys Arg Pro Glu Leu Glu Glu Ile Phe His
195 200 205

Gln Tyr Ser Gly Glu Asp Arg Val Leu Ser Ala Pro Glu Leu Leu Glu
210 215 220

Phe Leu Glu Asp Gln Gly Glu Glu Gly Ala Thr Leu Ala Arg Ala Gln
 225 230 235 240
 Gln Leu Ile Gln Thr Tyr Glu Leu Asn Glu Thr Ala Lys Gln His Glu
 245 250 255
 Leu Met Thr Leu Asp Gly Phe Met Met Tyr Leu Leu Ser Pro Glu Gly
 260 265 270
 Ala Ala Leu Asp Asn Thr His Thr Cys Val Phe Gln Asp Met Asn Gln
 275 280 285
 Pro Leu Ala His Tyr Phe Ile Ser Ser Ser His Asn Thr Tyr Leu Thr
 290 295 300
 Asp Ser Gln Ile Gly Gly Pro Ser Ser Thr Glu Ala Tyr Val Arg Ala
 305 310 315 320
 Phe Ala Gln Gly Cys Arg Cys Val Glu Leu Asp Cys Trp Glu Gly Pro
 325 330 335
 Gly Gly Glu Pro Val Ile Tyr His Gly His Thr Leu Thr Ser Lys Ile
 340 345 350
 Leu Phe Arg Asp Val Val Gln Ala Val Arg Asp His Ala Phe Thr Leu
 355 360 365
 Ser Pro Tyr Pro Val Ile Leu Ser Leu Glu Asn His Cys Gly Leu Glu
 370 375 380
 Gln Gln Ala Ala Met Ala Arg His Leu Cys Thr Ile Leu Gly Asp Met
 385 390 395 400
 Leu Val Thr Gln Ala Leu Asp Ser Pro Asn Pro Glu Glu Leu Pro Ser
 405 410 415
 Pro Glu Gln Leu Lys Gly Arg Val Leu Val Lys Gly Lys Lys Leu Pro
 420 425 430
 Ala Ala Arg Ser Glu Asp Gly Arg Ala Leu Ser Asp Arg Glu Glu Glu
 435 440 445
 Glu Glu Asp Asp Glu Glu Glu Glu Glu Val Glu Ala Ala Ala Gln
 450 455 460
 Arg Arg Leu Ala Lys Gln Ile Ser Pro Glu Leu Ser Ala Leu Ala Val
 465 470 475 480
 Tyr Cys His Ala Thr Arg Leu Arg Thr Leu His Pro Ala Pro Asn Ala
 485 490 495
 Pro Gln Pro Cys Gln Val Ser Ser Leu Ser Glu Arg Lys Ala Lys Lys
 500 505 510
 Leu Ile Arg Glu Ala Gly Asn Ser Phe Val Arg His Asn Ala Arg Gln
 515 520 525

Leu Thr Arg Val Tyr Pro Leu Gly Leu Arg Met Asn Ser Ala Asn Tyr
530 535 540

Ser Pro Gln Glu Met Trp Asn Ser Gly Cys Gln Leu Val Ala Leu Asn
545 550 555 560

Phe Gln Thr Pro Gly Tyr Glu Met Asp Leu Asn Ala Gly Arg Phe Leu
565 570 575

Val Asn Gly Gln Cys Gly Tyr Val Leu Lys Pro Ala Cys Leu Arg Gln
580 585 590

Pro Asp Ser Thr Phe Asp Pro Glu Tyr Pro Gly Pro Pro Arg Thr Thr
595 600 605

Leu Ser Ile Gln Val Leu Thr Ala Gln Gln Leu Pro Lys Leu Asn Ala
610 615 620

Glu Lys Pro His Ser Ile Val Asp Pro Leu Val Arg Ile Glu Ile His
625 630 635 640

Gly Val Pro Ala Asp Cys Ala Arg Gln Glu Thr Asp Tyr Val Leu Asn
645 650 655

Asn Gly Phe Asn Pro Arg Trp Gly Gln Thr Leu Gln Phe Gln Leu Arg
660 665 670

Ala Pro Glu Leu Ala Leu Val Arg Phe Val Val Glu Asp Tyr Asp Ala
675 680 685

Thr Ser Pro Asn Asp Phe Val Gly Gln Phe Thr Leu Pro Leu Ser Ser
690 695 700

Leu Lys Gln Gly Tyr Arg His Ile His Leu Leu Ser Lys Asp Gly Ala
705 710 715 720

Ser Leu Ser Pro Ala Thr Leu Phe Ile Gln Ile Arg Ile Gln Arg Ser
725 730 735

<210> 115

<211> 613

<212> PRT

<213> Homo sapiens

<400> 115

Met Ser Gln Arg Glu Arg Leu Asp His Trp Ile His Ser Tyr Leu His
1 5 10 15

Arg Ala Asp Ser Asn Gln Asp Ser Lys Met Ser Phe Lys Glu Ile Lys
20 25 30

Ser Leu Leu Arg Met Val Asn Val Asp Met Asn Asp Met Tyr Ala Tyr

35					40					45					
Leu	Leu	Phe	Lys	Glu	Cys	Asp	His	Ser	Asn	Asn	Asp	Arg	Leu	Glu	Gly
50						55					60				
Ala	Glu	Ile	Glu	Glu	Phe	Leu	Arg	Arg	Leu	Leu	Lys	Arg	Pro	Glu	Leu
65					70					75					80
Glu	Glu	Ile	Phe	His	Gln	Tyr	Ser	Gly	Glu	Asp	Arg	Val	Leu	Ser	Ala
				85					90					95	
Pro	Glu	Leu	Leu	Glu	Phe	Leu	Glu	Asp	Gln	Gly	Glu	Glu	Gly	Ala	Thr
			100					105					110		
Leu	Ala	Arg	Ala	Gln	Gln	Leu	Ile	Gln	Thr	Tyr	Glu	Leu	Asn	Glu	Thr
	115						120					125			
Ala	Lys	Gln	His	Glu	Leu	Met	Thr	Leu	Asp	Gly	Phe	Met	Met	Tyr	Leu
	130					135					140				
Leu	Ser	Pro	Glu	Gly	Ala	Ala	Leu	Asp	Asn	Thr	His	Thr	Cys	Val	Phe
145					150					155					160
Gln	Asp	Met	Asn	Gln	Pro	Leu	Ala	His	Tyr	Phe	Ile	Ser	Ser	Ser	His
			165						170					175	
Asn	Thr	Tyr	Leu	Thr	Asp	Ser	Gln	Ile	Gly	Gly	Pro	Ser	Ser	Thr	Glu
			180					185					190		
Ala	Tyr	Val	Arg	Ala	Phe	Ala	Gln	Gly	Cys	Arg	Cys	Val	Glu	Leu	Asp
	195						200					205			
Cys	Trp	Glu	Gly	Pro	Gly	Gly	Glu	Pro	Val	Ile	Tyr	His	Gly	His	Thr
	210					215					220				
Leu	Thr	Ser	Lys	Ile	Leu	Phe	Arg	Asp	Val	Val	Gln	Ala	Val	Arg	Asp
225					230					235					240
His	Ala	Phe	Thr	Leu	Ser	Pro	Tyr	Pro	Val	Ile	Leu	Ser	Leu	Glu	Asn
			245						250					255	
His	Cys	Gly	Leu	Glu	Gln	Gln	Ala	Ala	Met	Ala	Arg	His	Leu	Cys	Thr
			260				265						270		
Ile	Leu	Gly	Asp	Met	Leu	Val	Thr	Gln	Ala	Leu	Asp	Ser	Pro	Asn	Pro
	275						280					285			
Glu	Glu	Leu	Pro	Ser	Pro	Glu	Gln	Leu	Lys	Gly	Arg	Val	Leu	Val	Lys
	290					295					300				
Gly	Lys	Lys	Leu	Pro	Ala	Ala	Arg	Ser	Glu	Asp	Gly	Arg	Ala	Leu	Ser
305					310					315					320
Asp	Arg	Glu	Glu	Glu	Glu	Glu	Asp	Asp	Glu	Glu	Glu	Glu	Glu	Glu	Val
			325						330					335	
Glu	Ala	Ala	Ala	Gln	Arg	Leu	Ala	Lys	Gln	Ile	Ser	Pro	Glu	Leu	

340										345										350										
Ser	Ala	Leu	Ala	Val	Tyr	Cys	His	Ala	Thr	Arg	Leu	Arg	Thr	Leu	His															
		355					360						365																	
Pro	Ala	Pro	Asn	Ala	Pro	Gln	Pro	Cys	Gln	Val	Ser	Ser	Leu	Ser	Glu															
		370				375					380																			
Arg	Lys	Ala	Lys	Lys	Leu	Ile	Arg	Glu	Ala	Gly	Asn	Ser	Phe	Val	Arg															
	385				390					395					400															
His	Asn	Ala	Arg	Gln	Leu	Thr	Arg	Val	Tyr	Pro	Leu	Gly	Leu	Arg	Met															
				405					410					415																
Asn	Ser	Ala	Asn	Tyr	Ser	Pro	Gln	Glu	Met	Tip	Asn	Ser	Gly	Cys	Gln															
			420					425					430																	
Leu	Val	Ala	Leu	Asn	Phe	Gln	Thr	Pro	Gly	Tyr	Glu	Met	Asp	Leu	Asn															
		435				440						445																		
Ala	Gly	Arg	Phe	Leu	Val	Asn	Gly	Gln	Cys	Gly	Tyr	Val	Leu	Lys	Pro															
	450					455					460																			
Ala	Cys	Leu	Arg	Gln	Pro	Asp	Ser	Thr	Phe	Asp	Pro	Glu	Tyr	Pro	Gly															
	465				470					475				480																
Pro	Pro	Arg	Thr	Thr	Leu	Ser	Ile	Gln	Val	Leu	Thr	Ala	Gln	Gln	Leu															
			485					490					495																	
Pro	Lys	Leu	Asn	Ala	Glu	Lys	Pro	His	Ser	Ile	Val	Asp	Pro	Leu	Val															
		500					505						510																	
Arg	Ile	Glu	Ile	His	Gly	Val	Pro	Ala	Asp	Cys	Ala	Arg	Gln	Glu	Thr															
	515					520						525																		
Asp	Tyr	Val	Leu	Asn	Asn	Gly	Phe	Asn	Pro	Arg	Trp	Gly	Gln	Thr	Leu															
	530				535						540																			
Gln	Phe	Gln	Leu	Arg	Ala	Pro	Glu	Leu	Ala	Leu	Val	Arg	Phe	Val	Val															
	545				550					555					560															
Glu	Asp	Tyr	Asp	Ala	Thr	Ser	Pro	Asn	Asp	Phe	Val	Gly	Gln	Phe	Thr															
			565					570					575																	
Leu	Pro	Leu	Ser	Ser	Leu	Lys	Gln	Gly	Tyr	Arg	His	Ile	His	Leu	Leu															
		580					585					590																		
Ser	Lys	Asp	Gly	Ala	Ser	Leu	Ser	Pro	Ala	Thr	Leu	Phe	Ile	Gln	Ile															
		595				600						605																		
Arg	Ile	Gln	Arg	Ser																										
		610																												

<210> 116
 <211> 745
 <212> PRT

<213> Cricetulus griseus

<400> 116

Gly	Leu	Gln	Asp	Asp	Gln	Asp	Leu	Gln	Ala	Leu	Leu	Lys	Gly	Ser	Gln	1	5	10	15
Leu	Leu	Lys	Val	Lys	Ser	Ser	Ser	Trp	Arg	Arg	Glu	Arg	Phe	Tyr	Lys	20	25	30	
Leu	Gln	Glu	Asp	Cys	Lys	Thr	Ile	Trp	Gln	Glu	Ser	Arg	Lys	Val	Met	35	40	45	
Arg	Ser	Pro	Glu	Ser	Gln	Leu	Phe	Ser	Ile	Glu	Asp	Ile	Gln	Glu	Val	50	55	60	
Arg	Met	Gly	His	Arg	Thr	Glu	Gly	Leu	Glu	Lys	Phe	Ala	Arg	Asp	Ile	65	70	75	80
Pro	Glu	Asp	Arg	Cys	Phe	Ser	Ile	Val	Phe	Lys	Asp	Gln	Arg	Asn	Thr	85	90	95	
Leu	Asp	Leu	Ile	Ala	Pro	Ser	Ser	Ala	Asp	Ala	Gln	His	Trp	Val	Gln	100	105	110	
Gly	Leu	Arg	Lys	Ile	Ile	His	His	Ser	Gly	Ser	Met	Asp	Gln	Arg	Gln	115	120	125	
Lys	Leu	Gln	His	Trp	Ile	His	Ser	Cys	Leu	Arg	Lys	Ala	Asp	Lys	Asn	130	135	140	
Lys	Asp	Asn	Lys	Met	Asn	Phe	Lys	Glu	Leu	Lys	Asp	Phe	Leu	Lys	Glu	145	150	155	160
Leu	Asn	Ile	Gln	Val	Asp	Asp	Ser	Tyr	Ala	Arg	Lys	Ile	Phe	Arg	Glu	165	170	175	
Cys	Asp	His	Ser	Gln	Thr	Asp	Ser	Leu	Glu	Asp	Glu	Glu	Ile	Glu	Thr	180	185	190	
Phe	Tyr	Lys	Met	Leu	Thr	Gln	Arg	Ala	Glu	Ile	Asp	Arg	Val	Phe	Ala	195	200	205	
Glu	Ala	Ala	Gly	Ser	Ala	Glu	Thr	Leu	Ser	Val	Glu	Lys	Leu	Val	Thr	210	215	220	
Phe	Leu	Gln	His	Gln	Gln	Arg	Glu	Glu	Ala	Ala	Gly	Pro	Ala	Leu	Ala	225	230	235	240
Leu	Ser	Leu	Ile	Glu	Arg	Tyr	Glu	Pro	Ser	Glu	Thr	Ala	Lys	Ala	Gln	245	250	255	
Arg	Gln	Met	Thr	Lys	Asp	Gly	Phe	Leu	Met	Tyr	Leu	Leu	Ser	Ala	Asp	260	265	270	
Gly	Ser	Ala	Phe	Ser	Leu	Ala	His	Arg	Arg	Val	Tyr	Gln	Asp	Met	Asp	275	280	285	

Gln Pro Leu Ser His Tyr Leu Val Ser Ser Ser His Asn Thr Tyr Leu
 290 295 300
 Leu Glu Asp Gln Leu Thr Gly Pro Ser Ser Thr Glu Ala Tyr Ile Arg
 305 310 315 320
 Ala Leu Cys Lys Gly Cys Arg Cys Leu Glu Leu Asp Cys Trp Asp Gly
 325 330 335
 Pro Asn Gln Glu Pro Ile Ile Tyr His Gly Tyr Thr Phe Thr Ser Lys
 340 345 350
 Ile Leu Phe Tyr Asp Val Leu Arg Ala Ile Arg Asp Tyr Ala Phe Lys
 355 360 365
 Ala Ser Pro Tyr Pro Val Ile Leu Ser Leu Glu Asn His Cys Ser Leu
 370 375 380
 Glu Gln Gln Gln Val Met Ala Arg His Leu Lys Ala Ile Leu Gly Pro
 385 390 395 400
 Met Leu Leu Asp Gln Pro Leu Asp Gly Val Thr Met Ser Leu Pro Ser
 405 410 415
 Pro Glu Gln Leu Lys Gly Lys Ile Leu Leu Lys Gly Lys Lys Phe Gly
 420 425 430
 Gly Leu Leu Pro Ala Gly Gly Glu Asn Gly Pro Glu Thr Thr Asp Val
 435 440 445
 Ser Asp Glu Asp Glu Ala Ala Glu Met Glu Asp Glu Ala Val Arg Ser
 450 455 460
 Gln Val Gln Gln Lys Ser Lys Glu Asp Lys Leu Asn Val Ala Pro Glu
 465 470 475 480
 Leu Ser Asp Met Val Ile Tyr Cys Lys Ser Val His Phe Gly Gly Phe
 485 490 495
 Ser Asn Pro Ser Thr Ser Gly Gln Ala Phe Tyr Glu Met Ala Ser Phe
 500 505 510
 Ser Glu Asn Arg Ala Leu Arg Leu Leu Gln Glu Ser Gly Asn Asn Phe
 515 520 525
 Val Arg His Asn Val Ser His Leu Ser Arg Ile Tyr Pro Ala Gly Arg
 530 535 540
 Arg Thr Asp Ser Ser Asn Tyr Ser Pro Val Glu Met Trp Asn Gly Gly
 545 550 555 560
 Cys Gln Ile Val Ala Leu Asn Phe Gln Thr Pro Gly Pro Glu Met Asp
 565 570 575
 Val Tyr Leu Gly Arg Phe Gln Asp Asn Gly Ala Cys Gly Tyr Val Leu
 580 585 590

Lys Pro Ala Phe Leu Arg Asp Pro Asp Thr Ala Phe Asn Pro Arg Ala
595 600 605

Leu Thr Gln Gly Pro Trp Trp Ala Gln Lys Arg Leu Arg Val Arg Val
610 615 620

Ile Ser Gly Gln Gln Leu Pro Lys Val Asn Lys Ser Lys Asn Ser Ile
625 630 635 640

Val Asp Pro Lys Val Ile Val Glu Val His Gly Val Gly Gln Asp Val
645 650 655

Ala Ser Arg Gln Thr Ala Val Ile Thr Asn Asn Gly Phe Asn Pro Trp
660 665 670

Trp Asp Thr Glu Phe Glu Phe Glu Val Ala Val Pro Asp Leu Ala Leu
675 680 685

Val Arg Phe Val Val Glu Asp Tyr Asp Ala Ser Ser Lys Asn Asp Phe
690 695 700

Ile Gly Gln Ser Thr Ile Pro Trp Asn Ser Leu Lys Gln Gly Tyr Arg
705 710 715 720

His Val His Leu Leu Ser Lys Asn Gly Asp Gln His Pro Ser Ala Thr
725 730 735

Leu Phe Val Lys Ile Ser Leu Gln Asp
740 745

<210> 117

<211> 756

<212> PRT

<213> Mus musculus

<400> 117

Met Asp Ser Gly Arg Asp Phe Leu Thr Leu His Gly Leu Gln Asp Asp
1 5 10 15

Pro Asp Leu Gln Ala Leu Leu Lys Gly Ser Gln Leu Leu Lys Val Lys
20 25 30

Ser Ser Ser Trp Arg Arg Glu Arg Phe Tyr Lys Leu Gln Glu Asp Cys
35 40 45

Lys Thr Ile Trp Gln Glu Ser Arg Lys Val Met Arg Ser Pro Glu Ser
50 55 60

Gln Leu Phe Ser Ile Glu Asp Ile Gln Glu Val Arg Met Gly His Arg
65 70 75 80

Thr Glu Gly Leu Glu Lys Phe Ala Arg Asp Ile Pro Glu Asp Arg Cys
85 90 95

Phe Ser Ile Val Phe Lys Asp Gln Arg Asn Thr Leu Asp Leu Ile Ala
100 105 110

Pro Ser Pro Ala Asp Val Gln His Trp Val Gln Gly Leu Arg Lys Ile
 115 120 125
 Ile Asp Arg Ser Gly Ser Met Asp Gln Arg Gln Lys Leu Gln His Trp
 130 135 140
 Ile His Ser Cys Leu Arg Lys Ala Asp Lys Asn Lys Asp Asn Lys Met
 145 150 155 160
 Asn Phe Lys Glu Val Lys Asp Phe Leu Lys Glu Leu Asn Val Gln Val
 165 170 175
 Asp Asp Ser Tyr Ala Arg Lys Ile Phe Arg Glu Cys Asp His Ser Gln
 180 185 190
 Thr Asp Ser Leu Glu Asp Glu Glu Ile Glu Thr Phe Tyr Arg Met Leu
 195 200 205
 Thr Gln Arg Ala Glu Ile Asp Arg Ala Phe Ala Glu Ala Ala Gly Ser
 210 215 220
 Ala Glu Thr Leu Ser Val Glu Lys Leu Val Thr Phe Leu Gln His Gln
 225 230 235 240
 Gln Arg Glu Glu Glu Ala Gly Pro Ala Leu Ala Leu Ser Leu Ile Glu
 245 250 255
 Arg Tyr Glu Pro Ser Glu Thr Ala Lys Ala Gln Arg Gln Met Thr Lys
 260 265 270
 Asp Gly Phe Leu Met Tyr Leu Leu Ser Ala Asp Gly Asn Ala Phe Ser
 275 280 285
 Leu Ala His Arg Arg Val Tyr Gln Asp Met Asn Gln Pro Leu Ser His
 290 295 300
 Tyr Leu Val Ser Ser Ser His Asn Thr Tyr Leu Leu Glu Asp Gln Leu
 305 310 315 320
 Thr Gly Pro Ser Ser Thr Glu Ala Tyr Ile Arg Ala Leu Cys Lys Gly
 325 330 335
 Cys Arg Cys Leu Glu Leu Asp Cys Trp Asp Gly Pro Asn Gln Glu Pro
 340 345 350
 Ile Ile Tyr His Gly Tyr Thr Phe Thr Ser Lys Ile Leu Phe Cys Asp
 355 360 365
 Val Leu Arg Ala Ile Arg Asp Tyr Ala Phe Lys Ala Ser Pro Tyr Pro
 370 375 380
 Val Ile Leu Ser Leu Glu Asn His Cys Ser Leu Glu Gln Gln Arg Val
 385 390 395 400
 Met Ala His His Leu Arg Ala Ile Leu Gly Pro Met Leu Leu Asp Gln
 405 410 415

Pro Leu Asp Gly Val Thr Thr Ser Leu Pro Ser Pro Glu Gln Leu Lys
 420 425 430
 Glu Lys Ile Leu Leu Lys Gly Lys Lys Leu Gly Gly Leu Leu Pro Ala
 435 440 445
 Gly Gly Glu Asn Gly Pro Glu Ala Thr Asp Val Ser Asp Glu Asp Glu
 450 455 460
 Ala Ala Glu Met Glu Asp Glu Ala Val Arg Ser Gln Val Gln His Lys
 465 470 475 480
 Pro Lys Glu Asp Lys Leu Lys Leu Val Pro Glu Leu Ser Asp Met Val
 485 490 495
 Ile Tyr Cys Lys Ser Val His Phe Gly Gly Phe Ser Ser Pro Ser Thr
 500 505 510
 Ser Gly Gln Ala Phe Tyr Glu Met Ala Ser Phe Ser Glu Ser Arg Ala
 515 520 525
 Leu Arg Leu Leu Gln Glu Ser Gly Asn Ser Phe Val Arg His Asn Val
 530 535 540
 Gly His Leu Ser Arg Ile Tyr Pro Ala Gly Trp Arg Thr Asp Ser Ser
 545 550 555 560
 Asn Tyr Ser Pro Val Glu Met Trp Asn Gly Gly Cys Gln Ile Val Ala
 565 570 575
 Leu Asn Phe Gln Thr Pro Gly Pro Glu Met Asp Val Tyr Leu Gly Cys
 580 585 590
 Phe Gln Asp Asn Gly Gly Cys Gly Tyr Val Leu Lys Pro Ala Phe Leu
 595 600 605
 Arg Asp Pro Asp Thr Thr Phe Asn Ser Arg Ala Leu Thr Gln Gly Pro
 610 615 620
 Trp Trp Ala Pro Lys Lys Leu Arg Val Trp Ile Ile Ser Gly Gln Gln
 625 630 635 640
 Leu Pro Lys Val Asn Lys Asn Lys Asn Ser Ile Val Asp Pro Lys Val
 645 650 655
 Ile Val Glu Ile His Gly Val Gly Gln Asp Val Ala Ser Arg Gln Thr
 660 665 670
 Ala Val Ile Thr Asn Asn Gly Phe Asn Pro Arg Trp Asp Thr Glu Phe
 675 680 685
 Glu Phe Val Val Ala Val Pro Asp Leu Ala Leu Val Arg Phe Met Val
 690 695 700
 Glu Asp Tyr Asp Ser Ser Ser Lys Asn Asp Phe Ile Gly Gln Ser Thr
 705 710 715 720

Ile Pro Trp Asn Ser Leu Lys Gln Gly Tyr Arg His Val His Leu Leu
725 730 735

Ser Lys Asn Gly Asp Leu His Pro Ser Ala Thr Leu Phe Val Lys Ile
740 745 750

Ser Ile Gln Asp
755

<210> 118
<211> 756
<212> PRT
<213> Homo sapiens

<400> 118
Met Asp Ser Gly Arg Asp Phe Leu Thr Leu His Gly Leu Gln Asp Asp
1 5 10 15

Glu Asp Leu Gln Ala Leu Leu Lys Gly Ser Gln Leu Leu Lys Val Lys
20 25 30

Ser Ser Ser Trp Arg Arg Glu Arg Phe Tyr Lys Leu Gln Glu Asp Cys
35 40 45

Lys Thr Ile Trp Gln Glu Ser Arg Lys Val Met Arg Thr Pro Glu Ser
50 55 60

Gln Leu Phe Ser Ile Glu Asp Ile Gln Glu Val Arg Met Gly His Arg
65 70 75 80

Thr Glu Gly Leu Glu Lys Phe Ala Arg Asp Val Pro Glu Asp Arg Cys
85 90 95

Phe Ser Ile Val Phe Lys Asp Gln Arg Asn Thr Leu Asp Leu Ile Ala
100 105 110

Pro Ser Pro Ala Asp Ala Gln His Trp Val Leu Gly Leu His Lys Ile
115 120 125

Ile His His Ser Gly Ser Met Asp Gln Arg Gln Lys Leu Gln His Trp
130 135 140

Ile His Ser Cys Leu Arg Lys Ala Asp Lys Asn Lys Asp Asn Lys Met
145 150 155 160

Ser Phe Lys Glu Leu Gln Asn Phe Leu Lys Glu Leu Asn Ile Gln Val
165 170 175

Asp Asp Ser Tyr Ala Arg Lys Ile Phe Arg Glu Cys Asp His Ser Gln
180 185 190

Thr Asp Ser Leu Glu Asp Glu Glu Ile Glu Ala Phe Tyr Lys Met Leu
195 200 205

Thr Gln Arg Val Glu Ile Asp Arg Thr Phe Ala Glu Ala Ala Gly Pro

210	215	220
Gly Glu Thr Leu Ser Val Asp Gln Leu Val Thr Phe Leu Gln His Gln		
225	230	235 240
Gln Arg Glu Glu Ala Ala Gly Pro Ala Leu Ala Leu Ser Leu Ile Glu		
	245	250 255
Arg Tyr Glu Pro Ser Glu Thr Thr Lys Ala Gln Arg Gln Met Thr Lys		
	260	265 270
Asp Gly Phe Leu Met Tyr Leu Leu Ser Ala Asp Gly Ser Ala Phe Ser		
	275	280 285
Leu Ala His Arg Arg Val Tyr Gln Asp Met Gly Gln Pro Leu Ser His		
	290	295 300
Tyr Leu Val Ser Ser Ser His Asn Thr Tyr Leu Leu Glu Asp Gln Leu		
	305	310 315 320
Ala Gly Pro Ser Ser Thr Glu Ala Tyr Ile Arg Ala Leu Cys Lys Gly		
	325	330 335
Cys Arg Cys Leu Glu Leu Asp Cys Trp Asp Gly Pro Asn Gln Glu Pro		
	340	345 350
Ile Ile Tyr His Gly Tyr Thr Phe Thr Ser Lys Ile Leu Phe Cys Asp		
	355	360 365
Val Leu Arg Ala Ile Arg Asp Tyr Ala Phe Lys Ala Ser Pro Tyr Pro		
	370	375 380
Val Ile Leu Ser Leu Glu Asn His Cys Thr Leu Glu Gln Gln Arg Val		
	385	390 395 400
Met Ala Arg His Leu His Ala Ile Leu Gly Pro Met Leu Leu Asn Arg		
	405	410 415
Pro Leu Asp Gly Val Thr Asn Ser Leu Pro Ser Pro Glu Gln Leu Lys		
	420	425 430
Gly Lys Ile Leu Leu Lys Gly Lys Lys Leu Gly Gly Leu Leu Pro Pro		
	435	440 445
Gly Gly Glu Gly Gly Pro Glu Ala Thr Val Val Ser Asp Glu Asp Glu		
	450	455 460
Ala Ala Glu Met Glu Asp Glu Ala Val Arg Ser Arg Val Gln His Lys		
	465	470 475 480
Pro Lys Glu Asp Lys Leu Arg Leu Ala Gln Glu Leu Ser Asp Met Val		
	485	490 495
Ile Tyr Cys Lys Ser Val His Phe Gly Gly Phe Ser Ser Pro Gly Thr		
	500	505 510
Pro Gly Gln Ala Phe Tyr Glu Met Ala Ser Phe Ser Glu Asn Arg Ala		

515 520 525
 Leu Arg Leu Leu Gln Glu Ser Gly Asn Gly Phe Val Arg His Asn Val
 530 535 540
 Gly His Leu Ser Arg Ile Tyr Pro Ala Gly Trp Arg Thr Asp Ser Ser
 545 550 555 560
 Asn Tyr Ser Pro Val Glu Met Trp Asn Gly Gly Cys Gln Ile Val Ala
 565 570 575
 Leu Asn Phe Gln Thr Pro Gly Pro Glu Met Asp Val Tyr Gln Asp Arg
 580 585 590
 Phe Gln Asp Asn Gly Ala Cys Gly Tyr Val Leu Lys Pro Ala Phe Leu
 595 600 605
 Arg Asp Pro Asn Gly Thr Phe Asn Pro Arg Ala Leu Ala Gln Gly Pro
 610 615 620
 Trp Trp Ala Arg Lys Arg Leu Asn Ile Arg Val Ile Ser Gly Gln Gln
 625 630 635 640
 Leu Pro Lys Val Asn Lys Asn Lys Asn Ser Ile Val Asp Pro Lys Val
 645 650 655
 Thr Val Glu Ile His Gly Val Ser Arg Asp Val Ala Ser Arg Gln Thr
 660 665 670
 Ala Val Ile Thr Asn Asn Gly Phe Asn Pro Trp Trp Asp Thr Glu Phe
 675 680 685
 Ala Phe Glu Val Val Val Pro Asp Leu Ala Leu Ile Arg Phe Leu Val
 690 695 700
 Glu Asp Tyr Asp Ala Ser Ser Lys Asn Asp Phe Ile Gly Gln Ser Thr
 705 710 715 720
 Ile Pro Leu Asn Ser Leu Lys Gln Gly Tyr Arg His Val His Leu Met
 725 730 735
 Ser Lys Asn Gly Asp Gln His Pro Ser Ala Thr Leu Phe Val Lys Ile
 740 745 750
 Ser Leu Gln Asp
 755

<210> 119
 <211> 153
 <212> PRT
 <213> Homo sapiens

<400> 119
 Asp Met Ser Ile Pro Leu Ser His Tyr Phe Ile Ser Ser Ser His Asn
 1 5 10 15

Thr Tyr Leu Thr Gly Lys Gln Leu Trp Gly Lys Ser Ser Val Glu Ser
20 25 30

Tyr Arg Gln Gln Leu Asp Ala Gly Cys Arg Cys Val Glu Leu Asp Cys
35 40 45

Trp Asp Gly Lys Pro Asp Asp Glu Pro Ile Ile Tyr His Gly His Thr
50 55 60

Leu Thr Leu Glu Ile Lys Leu Lys Asp Val Leu Glu Ala Ile Lys Asp
65 70 75 80

Phe Ala Phe Lys Pro Thr Ser Pro Tyr Pro Val Ile Leu Ser Leu Glu
85 90 95

Asn His Cys Asn Ser Asp Asp Gln Gln Arg Lys Met Ala Lys Tyr Phe
100 105 110

Lys Glu Ile Phe Gly Asp Met Leu Leu Thr Lys Pro Thr Leu Asp Ser
115 120 125

Leu Thr Thr Glu Pro Gly Leu Pro Leu Pro Ser Leu Lys Asp Leu Arg
130 135 140

Gly Lys Ile Leu Leu Lys Asn Lys Lys
145 150

<210> 120

<211> 87

<212> PRT

<213> Homo sapiens

<400> 120

Lys Leu Leu Lys Glu Ser Pro Val Glu Phe Val Lys Tyr Asn Lys Arg
1 5 10 15

Gln Leu Ser Arg Val Tyr Pro Lys Gly Thr Arg Val Asp Ser Ser Asn
20 25 30

Phe Met Pro Gln Val Phe Trp Asn Ala Gly Cys Gln Met Val Ala Leu
35 40 45

Asn Phe Gln Thr Ser Asp Leu Pro Met Gln Ile Asn Asp Gly Met Phe
50 55 60

Glu Tyr Asn Gly Gly Gln Pro Asp Gly Ser Phe Lys Ser Gly Tyr Leu
65 70 75 80

Leu Lys Pro Glu Phe Leu Arg
85

<210> 121

<211> 95

<212> PRT

<213> Homo sapiens

<400> 121

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Leu Thr Val Thr Val Ile Glu Ala Arg Asn Leu Pro Lys Met Asp Lys
 1             5             10             15

Val Asn Gly Arg Leu Ser Asp Pro Tyr Val Lys Val Ser Leu Leu Gly
          20             25             30

Asp Lys Lys Asp Leu Lys Lys Phe Lys Thr Lys Val Val Lys Lys Thr
          35             40             45

Asn Gly Leu Asn Pro Val Trp Asn Glu Glu Thr Phe Val Phe Glu Lys
          50             55             60

Val Pro Leu Pro Glu Leu Ala Ser Lys Thr Leu Arg Phe Ala Val Tyr
          65             70             75             80

Asp Glu Asp Arg Phe Ser Arg Asp Asp Phe Ile Gly Gln Val Thr
          85             90             95

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<210> 122

<211> 323

<212> PRT

<213> Homo sapiens

<400> 122

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Met Asp Ser Lys Tyr Gln Cys Val Lys Leu Asn Asp Gly His Phe Met
 1             5             10             15

Pro Val Leu Gly Phe Gly Thr Tyr Ala Pro Ala Glu Val Pro Lys Ser
          20             25             30

Lys Ala Leu Glu Ala Val Lys Leu Ala Ile Glu Ala Gly Phe His His
          35             40             45

Ile Asp Ser Ala His Val Tyr Asn Asn Glu Glu Gln Val Gly Leu Ala
          50             55             60

Ile Arg Ser Lys Ile Ala Asp Gly Ser Val Lys Arg Glu Asp Ile Phe
          65             70             75             80

Tyr Thr Ser Lys Leu Trp Ser Asn Ser His Arg Pro Glu Leu Val Arg
          85             90             95

Pro Ala Leu Glu Arg Ser Leu Lys Asn Leu Gln Leu Asp Tyr Val Asp
          100             105             110

Leu Tyr Leu Ile His Phe Pro Val Ser Val Lys Pro Gly Glu Glu Val
          115             120             125

Ile Pro Lys Asp Glu Asn Gly Lys Ile Leu Phe Asp Thr Val Asp Leu
          130             135             140

Cys Ala Thr Trp Glu Ala Met Glu Lys Cys Lys Asp Ala Gly Leu Ala
          145             150             155             160

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Lys Ser Ile Gly Val Ser Asn Phe Asn His Arg Leu Leu Glu Met Ile
 155 170 175
 Leu Asn Lys Pro Gly Leu Lys Tyr Lys Pro Val Cys Asn Gln Val Glu
 180 185 190
 Cys His Pro Tyr Phe Asn Gln Arg Lys Leu Leu Asp Phe Cys Lys Ser
 195 200 205
 Lys Asp Ile Val Leu Val Ala Tyr Ser Ala Leu Gly Ser His Arg Glu
 210 215 220
 Glu Pro Trp Val Asp Pro Asn Ser Pro Val Leu Leu Glu Asp Pro Val
 225 230 235 240
 Leu Cys Ala Leu Ala Lys Lys His Lys Arg Thr Pro Ala Leu Ile Ala
 245 250 255
 Leu Arg Tyr Gln Leu Gln Arg Gly Val Val Val Leu Ala Lys Ser Tyr
 260 265 270
 Asn Glu Gln Arg Ile Arg Gln Asn Val Gln Val Phe Glu Phe Gln Leu
 275 280 285
 Thr Ser Glu Glu Met Lys Ala Ile Asp Gly Leu Asn Arg Asn Val Arg
 290 295 300
 Tyr Leu Thr Leu Asp Ile Phe Ala Gly Pro Pro Asn Tyr Pro Phe Ser
 305 310 315 320
 Asp Glu Tyr

<210> 123
 <211> 323
 <212> PRT
 <213> Homo sapiens

<400> 123
 Met Asp Ser Lys Tyr Gln Cys Val Lys Leu Asn Asp Gly His Phe Met
 1 5 10 15
 Pro Val Leu Gly Phe Gly Thr Tyr Ala Pro Ala Glu Val Pro Lys Ser
 20 25 30
 Lys Ala Leu Glu Ala Val Lys Leu Ala Ile Glu Ala Gly Phe His His
 35 40 45
 Ile Asp Ser Ala His Val Tyr Asn Asn Glu Glu Gln Val Gly Leu Ala
 50 55 60
 Ile Arg Ser Lys Ile Ala Asp Gly Ser Val Lys Arg Glu Asp Ile Phe
 65 70 75 80
 Tyr Thr Ser Lys Leu Trp Ser Asn Ser His Arg Pro Glu Leu Val Arg
 85 90 95

Pro Ala Leu Glu Arg Ser Leu Lys Asn Leu Gln Leu Asp Tyr Val Asp
100 105 110

Leu Tyr Leu Ile His Phe Pro Val Ser Val Lys Pro Gly Glu Glu Val
115 120 125

Ile Pro Lys Asp Glu Asn Gly Lys Ile Leu Phe Asp Thr Val Asp Leu
130 135 140

Cys Ala Thr Trp Glu Ala Met Glu Lys Cys Lys Asp Ala Gly Leu Ala
145 150 155 160

Lys Ser Ile Gly Val Ser Asn Phe Asn His Arg Leu Leu Glu Met Ile
165 170 175

Leu Asn Glu Pro Gly Leu Lys Tyr Glu Pro Val Cys Asn Gln Val Glu
180 185 190

Cys His Pro Tyr Phe Asn Gln Arg Lys Leu Leu Asp Phe Cys Lys Ser
195 200 205

Lys Asp Ile Val Leu Val Ala Tyr Ser Ala Leu Gly Ser His Arg Glu
210 215 220

Glu Pro Trp Val Asp Pro Asn Ser Pro Val Leu Leu Glu Asp Pro Val
225 230 235 240

Leu Cys Ala Leu Ala Lys Lys His Lys Arg Thr Pro Ala Leu Ile Ala
245 250 255

Leu Arg Tyr Gln Leu Gln Arg Gly Val Val Val Leu Ala Lys Ser Tyr
260 265 270

Asn Glu Gln Arg Ile Arg Gln Asn Val Gln Val Phe Glu Phe Gln Leu
275 280 285

Thr Ser Glu Glu Met Lys Ala Ile Asp Gly Leu Asn Arg Asn Val Arg
290 295 300

Tyr Leu Thr Leu Asp Ile Phe Ala Gly Pro Pro Asn Tyr Pro Ile Ser
305 310 315 320

Asp Glu Tyr

<210> 124

<211> 323

<212> PRT

<213> Homo sapiens

<400> 124

Met Asp Ser Lys Tyr Gln Cys Val Lys Leu Asn Asp Gly His Phe Met
1 5 10 15

Pro Val Leu Gly Phe Gly Thr Tyr Ala Pro Ala Glu Val Pro Lys Ser

20					25					30					
Lys	Ala	Leu	Glu	Ala	Thr	Lys	Leu	Ala	Ile	Glu	Ala	Gly	Phe	Arg	His
	35					40						45			
Ile	Asp	Ser	Ala	His	Leu	Tyr	Asn	Asn	Glu	Glu	Gln	Val	Gly	Leu	Ala
	50					55					60				
Ile	Arg	Ser	Lys	Ile	Ala	Asp	Gly	Ser	Val	Lys	Arg	Glu	Asp	Ile	Phe
	65					70					75				80
Tyr	Thr	Ser	Lys	Leu	Trp	Cys	Asn	Ser	His	Arg	Pro	Glu	Leu	Val	Arg
				85					90					95	
Pro	Ala	Leu	Glu	Arg	Ser	Leu	Lys	Asn	Leu	Gln	Leu	Asp	Tyr	Val	Asp
			100					105					110		
Leu	Tyr	Leu	Ile	His	Phe	Pro	Val	Ser	Val	Lys	Pro	Gly	Glu	Glu	Val
		115					120					125			
Ile	Pro	Lys	Asp	Glu	Asn	Gly	Lys	Ile	Leu	Phe	Asp	Thr	Val	Asp	Leu
	130					135					140				
Cys	Ala	Thr	Trp	Glu	Ala	Val	Glu	Lys	Cys	Lys	Asp	Ala	Gly	Leu	Ala
	145					150					155				160
Lys	Ser	Ile	Gly	Val	Ser	Asn	Phe	Asn	Arg	Arg	Gln	Leu	Glu	Met	Ile
			165						170					175	
Leu	Asn	Lys	Pro	Gly	Leu	Lys	Tyr	Lys	Pro	Val	Cys	Asn	Gln	Val	Glu
			180					185					190		
Cys	His	Pro	Tyr	Phe	Asn	Gln	Arg	Lys	Leu	Leu	Asp	Phe	Cys	Lys	Ser
		195					200					205			
Lys	Asp	Ile	Val	Leu	Val	Ala	Tyr	Ser	Ala	Leu	Gly	Ser	His	Arg	Glu
	210					215					220				
Glu	Pro	Trp	Val	Asp	Pro	Asn	Ser	Pro	Val	Leu	Leu	Glu	Asp	Pro	Val
	225					230					235				240
Leu	Cys	Ala	Leu	Ala	Lys	Lys	His	Lys	Arg	Thr	Pro	Ala	Leu	Ile	Ala
				245					250					255	
Leu	Arg	Tyr	Gln	Leu	Gln	Arg	Gly	Val	Val	Val	Leu	Ala	Lys	Ser	Tyr
			260					265					270		
Asn	Glu	Gln	Arg	Ile	Arg	Gln	Asn	Val	Gln	Val	Phe	Glu	Phe	Gln	Leu
		275					280					285			
Thr	Ser	Glu	Glu	Met	Lys	Ala	Ile	Asp	Gly	Leu	Asn	Arg	Asn	Val	Arg
		290				295					300				
Tyr	Leu	Thr	Leu	Asp	Ile	Phe	Ala	Gly	Pro	Pro	Asn	Tyr	Pro	Phe	Ser
	305					310					315				320
Asp	Glu	Tyr													

<210> 125
 <211> 329
 <212> PRT
 <213> Homo sapiens

<400> 125

Met	Asp	Ser	Lys	Tyr	Gln	Cys	Val	Lys	Leu	Asn	Asp	Gly	His	Phe	Met
1				5					10					15	
Pro	Val	Leu	Gly	Phe	Gly	Thr	Tyr	Ala	Pro	Ala	Glu	Val	Pro	Lys	Ser
		20						25					30		
Lys	Ala	Leu	Glu	Ala	Val	Lys	Leu	Ala	Ile	Glu	Ala	Gly	Tyr	His	His
	35						40					45			
Ile	Asp	Ser	Ala	His	Val	Tyr	Asn	Asn	Glu	Glu	Gln	Val	Gly	Leu	Ala
	50					55					60				
Ile	Arg	Ser	Lys	Ile	Ala	Asp	Gly	Ser	Val	Lys	Arg	Glu	Asp	Ile	Phe
	65			70						75				80	
Tyr	Thr	Ser	Lys	Leu	Trp	Ser	Asn	Ser	His	Arg	Pro	Glu	Leu	Val	Arg
			85						90					95	
Pro	Ala	Leu	Glu	Arg	Ser	Leu	Lys	Asn	Leu	Gln	Leu	Asp	Tyr	Ala	Asp
		100						105					110		
Leu	Tyr	Leu	Ile	His	Phe	Pro	Val	Ser	Val	Lys	Pro	Gly	Glu	Glu	Val
	115						120					125			
Ile	Pro	Lys	Asp	Glu	Asn	Gly	Lys	Ile	Leu	Phe	Asp	Thr	Val	Asp	Leu
	130					135					140				
Cys	Ala	Thr	Trp	Glu	Ala	Met	Glu	Lys	Cys	Lys	Asp	Ala	Gly	Leu	Ala
	145				150					155				160	
Lys	Ser	Ile	Gly	Val	Ser	Asn	Phe	Asn	His	Arg	Leu	Leu	Glu	Met	Ile
			165					170						175	
Leu	Asn	Glu	Pro	Gly	Leu	Lys	Tyr	Glu	Pro	Val	Cys	Asn	Gln	Val	Glu
		180						185					190		
Cys	His	Pro	Tyr	Phe	Asn	Gln	Arg	Lys	Leu	Leu	Asp	Phe	Cys	Lys	Ser
		195					200					205			
Lys	Asp	Ile	Val	Leu	Val	Ala	Tyr	Ser	Ala	Leu	Gly	Ser	His	Arg	Glu
	210					215					220				
Glu	Pro	Trp	Val	Asp	Pro	Asn	Ser	Pro	Val	Leu	Leu	Glu	Asp	Pro	Val
	225				230					235				240	
Leu	Cys	Ala	Leu	Ala	Lys	Lys	His	Lys	Arg	Thr	Pro	Ala	Leu	Ile	Ala
			245						250					255	

Leu Arg Tyr Gln Leu Gln Arg Gly Val Val Val Leu Ala Lys Ser Tyr
260 265 270

Asn Glu Gln Arg Ile Arg Gln Asn Val Gln Val Phe Glu Phe Gln Leu
275 280 285

Thr Ser Glu Glu Met Lys Ala Ile Asp Gly Leu Asn Arg Asn Val Arg
290 295 300

Tyr Leu Thr Leu Asp Ile Leu Leu Ala Pro Leu Ile Ile Arg Phe Leu
305 310 315 320

Met Asn Ile Asn Met Glu Gly Ile Ala
325

<210> 126

<211> 323

<212> PRT

<213> Macaca fuscata

<400> 126

Met Asp Ser Lys His Gln Cys Val Lys Leu Asn Asp Gly His Phe Met
1 5 10 15

Pro Val Leu Gly Phe Gly Thr Tyr Ala Pro Ala Glu Val Pro Lys Asn
20 25 30

Lys Ala Ile Glu Ala Thr Lys Leu Ala Ile Glu Ala Gly Phe Arg His
35 40 45

Ile Asp Ser Ala His Leu Tyr Asn Asn Glu Glu Tyr Val Gly Leu Ala
50 55 60

Ile Arg Ser Lys Ile Ala Asp Gly Thr Val Lys Arg Glu Asp Ile Phe
65 70 75 80

Tyr Thr Ser Lys Leu Trp Cys Asn Ser His Arg Pro Glu Phe Val Arg
85 90 95

Pro Ala Leu Glu Arg Ser Leu Lys Asn Leu Gln Leu Asp Tyr Val Asp
100 105 110

Leu Tyr Leu Ile His Phe Pro Val Ser Leu Lys Pro Gly Glu Glu Leu
115 120 125

Ile Pro Lys Asp Glu Asn Gly Lys Leu Leu Phe Asp Thr Val Asp Leu
130 135 140

Cys Ala Thr Trp Glu Ala Met Glu Lys Cys Lys Asp Ala Gly Leu Ala
145 150 155 160

Lys Ser Ile Gly Val Ser Asn Phe Asn Arg Gln Leu Glu Met Ile
165 170 175

Leu Asn Lys Pro Gly Leu Lys Tyr Lys Pro Val Cys Asn Gln Val Glu
180 185 190

Cys His Pro Tyr Leu Asn Gln Arg Lys Leu Leu Asp Phe Cys Lys Ser
195 200 205

Lys Asp Ile Val Leu Val Ala Tyr Ser Ala Leu Gly Ser His Arg Glu
210 215 220

Lys Pro Trp Val Asp Gln Asn Ser Pro Val Leu Leu Glu Asp Pro Val
225 230 235 240

Leu Cys Ala Leu Ala Lys Lys His Lys Arg Thr Pro Ala Leu Ile Ala
245 250 255

Leu Arg Tyr Gln Leu Gln Arg Gly Val Val Val Leu Ala Lys Ser Tyr
260 265 270

Asn Glu Gln Arg Ile Arg Glu Asn Met Lys Val Phe Glu Phe Gln Leu
275 280 285

Thr Ser Glu Asp Met Lys Ala Ile Asp Gly Leu Asp Arg Asn Ile Arg
290 295 300

Tyr Leu Thr Leu Asp Ile Phe Ala Gly Pro Pro Asn Tyr Pro Phe Ser
305 310 315 320

Asp Glu Tyr

<210> 127

<211> 368

<212> PRT

<213> Homo sapiens

<400> 127

Leu Asn Asn Gly Leu Lys Leu Lys Met Pro Leu Leu Gly Leu Gly Thr
1 5 10 15

Tip Gln Thr Pro Gly Glu Glu Asp Tyr Leu Tip Gly Arg Val Asp Lys
20 25 30

Glu Glu Ala Lys Glu Ala Val Lys Ala Ala Leu Asp Ala Gly Tyr Arg
35 40 45

His Ile Asp Thr Ala Ala Ile Tyr Gly Asn Gly Gln Lys Pro Gly Gln
50 55 60

Ser Glu Glu Glu Val Gly Glu Ala Ile Lys Glu Ala Leu Glu Glu Gly
65 70 75 80

Ser Val Val Val Ile Thr Lys Tyr Lys Arg Glu Asp Ile Phe Ile Thr
85 90 95

Ser Asp Lys Leu Trp Asn Thr Phe Gly Pro Asp Leu Ser Glu Tyr Gly
100 105 110

His Ser Pro Lys His Val Arg Glu Ala Leu Glu Lys Ser Leu Lys Arg

115	120	125
Leu Gly Leu Asp Tyr Val Asp Leu Tyr Leu Ile His Trp Pro Asp Pro 130 135 140		
Phe Lys Pro Gly Ile Glu Asp Lys Tyr Pro Leu Gly Phe Pro Thr Asp 145 150 155 160		
Asp Asp Gly Lys Leu Ile Tyr Glu Asp Val Pro Ile Glu Glu Thr Trp 165 170 175		
Lys Ala Leu Glu Lys Leu Val Asp Glu Gly Lys Val Arg Ser Ile Gly 180 185 190		
Val Ser Asn Phe Ser Ala Glu Gln Leu Glu Glu Leu Leu Ser Tyr Ala 195 200 205		
Gly Lys Leu Lys Leu Ile Pro Val Val Asn Gln Val Glu Leu His 210 215 220		
Pro Tyr Leu Arg Gln Asp Glu Leu Arg Lys Val Pro Leu Leu Pro Phe 225 230 235 240		
Cys Lys Ser His Gly Ile Ala Val Thr Ala Tyr Ser Pro Leu Gly Ser 245 250 255		
Gly Leu Leu Thr Gly Lys Tyr Lys Thr Glu Glu Asp Ile Pro Gly Asp 260 265 270		
Arg Arg Ser Leu Leu Gly Ala Asp Lys Gly Trp Ser Glu Leu Gly Ser 275 280 285		
Pro Glu Leu Leu Glu Asp Pro Val Leu Lys Ala Ile Ala Glu Lys Tyr 290 295 300		
Gly Tyr Lys Asp Lys Thr Pro Ala Gln Val Ala Leu Arg Trp Ala Leu 305 310 315 320		
Gln Arg Gly Gly Gly Ala Gly Val Val Val Val Ile Pro Lys Ser Ser 325 330 335		
Asn Pro Glu Arg Ile Lys Glu Asn Leu Lys Ala Phe Asp Asp Phe Glu 340 345 350		
Leu Thr Glu Glu Asp Met Lys Ala Ile Asp Glu Leu Asp Arg Gly Lys 355 360 365		

<210> 128
 <211> 255
 <212> PRT
 <213> Staphylococcus aureus
 <400> 128

Met Thr Met Met Asp Met Asn Phe Lys Tyr Cys His Lys Ile Met Lys
 1 5 10 15
 Lys His Ser Lys Ser Phe Ser Tyr Ala Phe Asp Leu Leu Pro Glu Asp
 20 25 30
 Gln Arg Lys Ala Val Trp Ala Ile Tyr Ala Val Cys Arg Lys Ile Asp
 35 40 45
 Asp Ser Ile Asp Val Tyr Glv Asp Ile Gln Phe Leu Ile Gln Ile Lys
 50 55 60
 Glu Asp Ile Gln Ser Ile Glu Lys Tyr Pro Tyr Glu His His His Phe
 65 70 75 80
 Gln Ser Asp Arg Arg Ile Met Met Ala Leu Gln His Val Ala Gln His
 85 90 95
 Lys Asn Ile Ala Phe Gln Ser Phe Tyr Asn Leu Ile Asp Thr Val Tyr
 100 105 110
 Lys Asp Gln His Phe Thr Met Phe Glu Thr Asp Ala Glu Leu Phe Gly
 115 120 125
 Tyr Cys Tyr Gly Val Ala Gly Thr Val Ser Glu Val Leu Thr Pro Ile
 130 135 140
 Leu Ser Asp His Glu Thr His Gln Thr Tyr Asp Val Ala Arg Arg Leu
 145 150 155 160
 Gly Glu Ser Leu Gln Leu Ile Asn Ile Leu Arg Asp Val Gly Glu Asp
 165 170 175
 Phe Asp Asn Glu Arg Ile Tyr Phe Ser Lys Gln Arg Leu Lys Gln Tyr
 180 185 190
 Glu Val Asp Ile Ala Glu Val Tyr Gln Asn Gly Val Asn Asn His Tyr
 195 200 205
 Ile Asp Leu Trp Glu Tyr Tyr Ala Ala Ile Ala Glu Lys Asp Phe Gln
 210 215 220
 Asp Val Met Asp Gln Ile Lys Val Phe Ser Ile Glu Ala Ser Pro Ile
 225 230 235 240
 Ile Glu Leu Ala Ala Arg Ile Tyr Ile Glu Ile Leu Gly Arg Ser
 245 250 255

<210> 129

<211> 254

<212> PRT

<213> Staphylococcus aureus

<400> 129

Met Thr Met Met Asp Met Asn Phe Lys Tyr Cys His Lys Ile Met Lys
 1 5 10 15

Lys His Ser Lys Ser Phe Ser Tyr Ala Phe Asp Leu Leu Pro Gln Asp
 20 25 30

Gln Arg Lys Ala Val Trp Ala Ile Tyr Ala Val Cys Arg Lys Ile Asp
 35 40 45

Asp Ser Ile Asp Val Tyr Gly Asp Ile Gln Phe Leu Ile Gln Ile Lys
 50 55 60

Glu Asp Ile Gln Ser Ile Glu Lys Tyr Pro Tyr Glu His His His Phe
 65 70 75 80

Gln Ser Asp Arg Arg Ile Met Met Ala Leu Gln His Val Ala Gln His
 85 90 95

Lys Asn Ile Ala Phe Gln Ser Phe Tyr Asn Leu Ile Asp Thr Val Tyr
 100 105 110

Lys Val Asn Ile Leu Gln Cys Leu Lys Arg Thr Leu Glu Leu Phe Gly
 115 120 125

Tyr Cys Tyr Gly Val Ala Gly Arg Arg Ser Ser Ile Asp Ala Asp Phe
 130 135 140

Ser Asp His Glu Thr His Gln Thr Tyr Asp Val Ala Arg Arg Leu Gly
 145 150 155 160

Glu Ser Leu Gln Leu Ile Asn Ile Leu Arg Asp Val Gly Glu Asp Phe
 165 170 175

Asp Asn Glu Arg Ile Tyr Phe Ser Lys Gln Arg Leu Lys Gln Tyr Glu
 180 185 190

Val Asp Ile Ala Glu Val Tyr Gln Asn Gly Val Asn Asn His Tyr Ile
 195 200 205

Asp Leu Trp Glu Tyr Tyr Ala Ala Ile Ala Glu Lys Asp Phe Gln Asp
 210 215 220

Val Met Asp Gln Ile Lys Val Phe Ser Ile Glu Ala Ser Pro Ile Ile
 225 230 235 240

Glu Leu Ala Ala Arg Ile Tyr Ile Glu Ile Leu Gly Arg Ser
 245 250

<210> 130

<211> 136

<212> PRT

<213> Staphylococcus aureus

<400> 130

Met Ser Val Thr Leu Leu Trp Val Val Ser Pro Asn Ser Gln Leu Ser
 1 5 10 15

Asn Cys Phe Gly Phe Val Asp Ser Val Arg Glu Glu Asn Arg Leu Phe

20	25	30
Tyr Ser Ser Arg Phe Leu Tyr Gln His Gln Thr Arg Thr Ala Val Phe 35 40 45		
Asn Ser Arg Pro Lys Gln Phe Asn Asn Ser Asn Lys Gln Arg Arg Asn 50 55 60		
Ser Tyr Pro Leu Asp Thr Asp Leu Arg His Pro Cys Ser Ser Gly Ile 65 70 75 80		
Asp Leu Pro Glu Ile Ser Cys Met Val Ala Ser Thr Ala Gly Glu Val 85 90 95		
Ala Met Ser Ser Glu Glu Met Val Tyr Asn Val Val Leu Lys Gln Ala 100 105 110		
Ala Leu Val Asn Lys Gln Pro Ser Gly Val Thr Arg Asp Leu Asp Val 115 120 125		
Asn Pro Asp Ile Ala Leu Pro Gly Thr Leu Ser Leu Leu Ser Glu Ala 130 135 140		
Tyr Asp Arg Cys Gly Glu Val Cys Ala Glu Tyr Ala Lys Thr Phe Tyr 145 150 155 160		
Leu Gly Thr Leu Leu Met Thr Ser Glu Arg Arg Arg Ala Ile Trp Ala 165 170 175		
Ile Tyr Val Trp Cys Arg Arg Thr Asp Glu Leu Val Asp Gly Pro Asn 180 185 190		
Ala Ser His Ile Thr Pro Thr Ala Leu Asp Arg Trp Glu Ser Arg Leu 195 200 205		
Glu Asp Leu Phe Arg Gly Arg Pro Phe Asp Met Leu Asp Ala Ala Leu 210 215 220		
Ser Asp Thr Val Thr Lys Phe Pro Val Asp Ile Gln Pro Phe Arg Asp 225 230 235 240		
Met Ile Glu Gly Met Arg Met Asp Leu Arg Lys Ser Arg Tyr Lys Asn 245 250 255		
Phe Asp Glu Leu Tyr Leu Tyr Cys Tyr Tyr Val Ala Gly Thr Val Gly 260 265 270		
Leu Met Ser Val Pro Val Met Gly Ile Ala Pro Asp Ser Gln Ala Thr 275 280 285		
Thr Glu Ser Val Tyr Asn Ala Ala Leu Ala Leu Gly Ile Ala Asn Gln 290 295 300		
Leu Thr Asn Ile Leu Arg Asp Val Gly Glu Asp Ala Arg Arg Gly Arg 305 310 315 320		
Val Tyr Leu Pro Gln Asp Glu Leu Ala Gln Ala Gly Leu Ser Asp Asp		

325	330	335
Asp Ile Phe Ala Gly Glu Val Thr	Ile Lys Trp Arg Asn Phe Met Lys	
340	345	350
Asn Gln Ile Lys Arg Ala Arg Met Phe Phe Asp Met Ala Glu Asn Gly		
355	360	365
Val Thr Glu Leu Ser Glu Ala Ser Arg Trp Pro Val Trp Ala Ser Leu		
370	375	380
Leu Leu Tyr Arg Gln Ile Leu Asp Glu Ile Glu Ala Asn Asp Tyr Asn		
385	390	395
Asn Phe Thr Lys Arg Ala Tyr Val Ser Lys Ala Lys Lys Ile Ala Ala		
405	410	415
Leu Pro Ile Ala Tyr Ala Lys Ser Leu Leu Arg Pro Ser Arg Ile Tyr		
420	425	430
Thr Ser Lys Ala		
435		

<210> 131
 <211> 410
 <212> PRT
 <213> Citrus unshiu

<400> 131
Met Ala Ile Ile Leu Val Arg Ala Ala Ser Pro Gly Leu Ser Ala Ala
1 5 10 15
Asp Ser Ile Ser His Gln Gly Thr Leu Gln Cys Ser Thr Leu Leu Lys
20 25 30
Thr Lys Arg Pro Ala Ala Arg Arg Trp Met Pro Cys Ser Leu Leu Gly
35 40 45
Leu His Pro Trp Glu Ala Gly Arg Pro Ser Pro Ala Val Tyr Ser Ser
50 55 60
Leu Pro Val Asn Pro Ala Gly Glu Ala Val Val Ser Ser Glu Gln Lys
65 70 75 80
Val Tyr Asp Val Val Leu Lys Gln Ala Ala Leu Leu Lys Arg Gln Leu
85 90 95
Arg Thr Pro Val Leu Asp Ala Arg Pro Gln Asp Met Asp Met Pro Arg
100 105 110
Asn Gly Leu Lys Glu Ala Tyr Asp Arg Cys Gly Glu Ile Cys Glu Glu
115 120 125
Tyr Ala Lys Thr Phe Tyr Leu Gly Thr Met Leu Met Thr Glu Glu Arg
130 135 140

Arg Arg Ala Ile Trp Ala Ile Tyr Val Trp Cys Arg Arg Thr Asp Glu
 145 150 155 160
 Leu Val Asp Gly Pro Asn Ala Asn Tyr Ile Thr Pro Thr Ala Leu Asp
 165 170 175
 Arg Trp Glu Lys Arg Leu Glu Asp Leu Phe Thr Gly Arg Pro Tyr Asp
 180 185 190
 Met Leu Asp Ala Ala Leu Ser Asp Thr Ile Ser Arg Phe Pro Ile Asp
 195 200 205
 Ile Gln Pro Phe Arg Asp Met Ile Glu Gly Met Arg Ser Asp Leu Arg
 210 215 220
 Lys Thr Arg Tyr Asn Asn Phe Asp Glu Leu Tyr Met Tyr Cys Tyr Tyr
 225 230 235 240
 Val Ala Gly Thr Val Gly Leu Met Ser Val Pro Val Met Gly Ile Ala
 245 250 255
 Thr Glu Ser Lys Ala Thr Thr Glu Ser Val Tyr Ser Ala Ala Leu Ala
 260 265 270
 Leu Gly Ile Ala Asn Gln Leu Thr Asn Ile Leu Arg Asp Val Gly Glu
 275 280 285
 Asp Ala Arg Arg Gly Arg Ile Tyr Leu Pro Gln Asp Glu Leu Ala Gln
 290 295 300
 Ala Gly Leu Ser Asp Glu Asp Ile Phe Lys Gly Val Val Thr Asn Arg
 305 310 315 320
 Trp Arg Asn Phe Met Lys Arg Gln Ile Lys Arg Ala Arg Met Phe Phe
 325 330 335
 Glu Glu Ala Glu Arg Gly Val Asn Glu Leu Ser Gln Ala Ser Arg Trp
 340 345 350
 Pro Val Trp Ala Ser Leu Leu Leu Tyr Arg Gln Ile Leu Asp Glu Ile
 355 360 365
 Glu Ala Asn Asp Tyr Asn Asn Phe Thr Lys Arg Ala Tyr Val Gly Lys
 370 375 380
 Gly Lys Lys Leu Leu Ala Leu Pro Val Ala Tyr Gly Lys Ser Leu Leu
 385 390 395 400
 Leu Pro Cys Ser Leu Arg Asn Gly Gln Thr
 405 410

<210> 132
 <211> 38
 <212> PRT
 <213> Homo sapiens

<400> 133

Leu Ala Gln Gly Ser Lys Ser Phe Ala Leu Ala Ile Arg Leu Leu Pro
1 5 10 15

Pro Glu Leu Arg Arg Ala Val Leu Ala Leu Tyr Leu Trp Cys Arg Ala
20 25 30

Ala Asp Asp Val Val Asp
35

<210> 133

<211> 225

<212> PRT

<213> Homo sapiens

<400> 133

Asp Ala Pro Val Asp Arg Ala Phe Ala Pro Cys Ala Tyr Gln Ala Leu
1 5 10 15

Asp Val Leu Glu Glu Phe Asp Ile Pro Arg Glu Pro Phe Arg Asp Leu
20 25 30

Ile Glu Asp Ile Thr Lys Arg Met Gly Ala Gly Met Ala Met Asp Leu
35 40 45

Glu Lys Arg Glu Lys Asn Leu Gln Tyr Arg Tyr Ala Thr Phe Glu Asp
50 55 60

Leu Leu Arg Tyr Cys Tyr Tyr Val Ala Gly Thr Val Gly Leu Met Met
65 70 75 80

Ala Arg Leu Met Gly Val Arg Lys Leu Glu Asp Pro Ala Asp Trp Gln
85 90 95

Leu Glu Glu Val Leu Asp Leu Arg Ala Cys Asp Leu Gly Leu Ala Leu
100 105 110

Gln Leu Thr Asn Ile Ala Arg Asp Val Gly Glu Asp Ala Arg Arg Gly
115 120 125

Pro Cys Arg Val Tyr Leu Pro Thr Glu Trp Leu Ser Gln Tyr Gly Leu
130 135 140

Ser Leu Glu Asp Leu Leu Ala Pro Glu Asn Thr Asp Lys Arg Ile Arg
145 150 155 160

Arg Val Leu Arg Arg Leu Leu Asp Asn Ala Arg Ala Tyr Tyr Glu Asp
165 170 175

Ala Leu Thr Gly Leu Ala Gly Leu Pro Pro Gln Ser Arg Phe Pro Ile
180 185 190

Ala Ala Ala Pro Gln Val Tyr Ala Gly Ile Gly Asp Ala Ile Glu Ala
195 200 205

Asn Gly Tyr Asp Val Phe Arg Arg Arg Ala Lys Thr Arg Lys Gly Glu

210 215 220

1,25
325

<210> 134
<211> 661
<212> PRT
<213> Homo sapiens

<400> 134
Met Ala Phe Asp Val Ser Cys Phe Phe Trp Val Val Leu Phe Ser Ala
1 5 10 15
Gly Cys Lys Val Ile Thr Ser Trp Asp Gln Met Cys Ile Glu Lys Glu
20 25 30
Ala Asn Lys Thr Tyr Asn Cys Glu Asn Leu Gly Leu Ser Glu Ile Pro
35 40 45
Asp Thr Leu Pro Asn Thr Thr Glu Phe Leu Glu Phe Ser Phe Asn Phe
50 55 60
Leu Pro Thr Ile His Asn Arg Thr Phe Ser Arg Leu Met Asn Leu Thr
65 70 75 80
Phe Leu Asp Leu Thr Arg Cys Gln Ile Asn Trp Ile His Glu Asp Thr
85 90 95
Phe Gln Ser His His Gln Leu Ser Thr Leu Val Leu Thr Gly Asn Pro
100 105 110
Leu Ile Phe Met Ala Glu Thr Ser Leu Asn Gly Pro Lys Ser Leu Lys
115 120 125
His Leu Phe Leu Ile Gln Thr Gly Ile Ser Asn Leu Glu Phe Ile Pro
130 135 140
Val His Asn Leu Glu Asn Leu Glu Ser Leu Tyr Leu Gly Ser Asn His
145 150 155 160
Ile Ser Ser Ile Lys Phe Pro Lys Asp Phe Pro Ala Arg Asn Leu Lys
165 170 175
Val Leu Asp Phe Gln Asn Asn Ala Ile His Tyr Ile Ser Arg Glu Asp
180 185 190
Met Arg Ser Leu Glu Gln Ala Ile Asn Leu Ser Leu Asn Phe Asn Gly
195 200 205
Asn Asn Val Lys Gly Ile Glu Leu Gly Ala Phe Asp Ser Thr Val Phe
210 215 220
Gln Ser Leu Asn Phe Gly Gly Thr Pro Asn Leu Ser Val Ile Phe Asn
225 230 235 240

Gly Leu Gln Asn Ser Thr Thr Gln Ser Leu Trp Leu Gly Thr Phe Glu
 245 250 255
 Asp Ile Asp Asp Glu Asp Ile Ser Ser Ala Met Leu Lys Gly Leu Cys
 260 265 270
 Glu Met Ser Val Glu Ser Leu Asn Leu Gln Glu His Arg Phe Ser Asp
 275 280 285
 Ile Ser Ser Thr Thr Phe Gln Cys Phe Thr Gln Leu Gln Glu Leu Asn
 290 295 300
 Leu Thr Ala Thr His Leu Lys Gly Leu Pro Ser Gly Met Lys Gly Leu
 305 310 315 320
 Asn Leu Leu Lys Lys Leu Val Leu Ser Val Asn His Phe Asp Gln Leu
 325 330 335
 Cys Gln Ile Ser Ala Ala Asn Phe Pro Ser Leu Thr His Leu Tyr Ile
 340 345 350
 Arg Gly Asn Val Lys Lys Leu His Leu Gly Val Gly Cys Leu Glu Lys
 355 360 365
 Leu Gly Asn Leu Gln Thr Leu Asp Leu Ser His Asn Asp Ile Glu Ala
 370 375 380
 Ser Asp Cys Cys Ser Leu Gln Leu Lys Asn Leu Ser His Leu Gln Thr
 385 390 395 400
 Leu Asn Leu Ser His Asn Glu Pro Leu Gly Leu Gln Ser Gln Ala Phe
 405 410 415
 Lys Glu Cys Pro Gln Leu Glu Leu Leu Asp Leu Ala Phe Thr Arg Leu
 420 425 430
 His Ile Asn Ala Pro Gln Ser Pro Phe Gln Asn Leu His Phe Leu Gln
 435 440 445
 Val Leu Asn Leu Thr Tyr Cys Phe Leu Asp Thr Ser Asn Gln His Leu
 450 455 460
 Leu Ala Gly Leu Pro Val Leu Arg His Leu Asn Leu Lys Gly Asn His
 465 470 475 480
 Phe Gln Asp Gly Thr Ile Thr Lys Thr Asn Leu Leu Gln Thr Val Gly
 485 490 495
 Ser Leu Glu Val Leu Ile Leu Ser Ser Cys Gly Leu Leu Ser Ile Asp
 500 505 510
 Gln Gln Ala Phe His Ser Leu Gly Lys Met Ser His Val Asp Leu Ser
 515 520 525
 His Asn Ser Leu Thr Cys Asp Ser Ile Asp Ser Leu Ser His Leu Lys
 530 535 540

Gly Ile Tyr Leu Asn Leu Ala Ala Asn Ser Ile Asn Ile Ile Ser Pro
545 550 555 560

Arg Leu Leu Pro Ile Leu Ser Gln Gln Ser Thr Ile Asn Leu Ser His
565 570 575

Asn Pro Leu Asp Cys Thr Cys Ser Asn Ile His Phe Leu Thr Trp Tyr
580 585 590

Lys Glu Asn Leu His Lys Leu Glu Gly Ser Glu Glu Thr Thr Cys Ala
595 600 605

Asn Pro Pro Ser Leu Arg Gly Val Lys Leu Ser Asp Val Lys Leu Ser
610 615 620

Cys Gly Ile Thr Ala Ile Gly Ile Phe Phe Leu Ile Val Phe Leu Leu
625 630 635 640

Leu Leu Ala Ile Leu Leu Phe Phe Ala Val Lys Tyr Leu Leu Arg Trp
645 650 655

Lys Tyr Gln His Ile
660

<210> 135

<211> 661

<212> PRT

<213> Mus musculus

<400> 135

Met Ala Pro Asp Ile Ser Cys Phe Phe Leu Val Ala Leu Phe Leu Ala
1 5 10 15

Ser Cys Arg Ala Thr Thr Ser Ser Asp Gln Lys Cys Ile Glu Lys Glu
20 25 30

Val Asn Lys Thr Tyr Asn Cys Glu Asn Leu Gly Leu Asn Glu Ile Pro
35 40 45

Gly Thr Leu Pro Asn Ser Thr Glu Cys Leu Glu Phe Ser Phe Asn Val
50 55 60

Leu Pro Thr Ile Gln Asn Thr Thr Phe Ser Arg Leu Ile Asn Leu Thr
65 70 75 80

Phe Leu Asp Leu Thr Arg Cys Gln Ile Tyr Trp Ile His Glu Asp Thr
85 90 95

Phe Gln Ser Gln His Arg Leu Asp Thr Leu Val Leu Thr Ala Asn Pro
100 105 110

Leu Ile Phe Met Ala Glu Thr Ala Leu Ser Gly Pro Lys Ala Leu Lys
115 120 125

His Leu Phe Phe Ile Gln Thr Gly Ile Ser Ser Ile Asp Phe Ile Pro
130 135 140

Leu His Asn Gln Lys Thr Leu Glu Ser Leu Tyr Leu Gly Ser Asn His
 145 150 155 160
 Ile Ser Ser Ile Lys Leu Pro Lys Gly Phe Pro Thr Glu Lys Leu Lys
 165 170 175
 Val Leu Asp Phe Gln Asn Asn Ala Ile His Trp Leu Ser Lys Glu Asp
 180 185 190
 Met Ser Ser Leu Gln Gln Ala Thr Asn Leu Ser Leu Asn Leu Asn Gly
 195 200 205
 Asn Asp Ile Ala Gly Ile Glu Pro Gly Ala Phe Asp Ser Ala Val Phe
 210 215 220
 Gln Ser Leu Asn Phe Gly Gly Thr Gln Asn Leu Leu Val Ile Phe Lys
 225 230 235 240
 Gly Leu Lys Asn Ser Thr Ile Gln Ser Leu Trp Leu Gly Thr Phe Glu
 245 250 255
 Asp Met Asp Asp Glu Asp Ile Ser Pro Ala Val Phe Glu Gly Leu Cys
 260 265 270
 Glu Met Ser Val Glu Ser Ile Asn Leu Gln Lys His Tyr Phe Phe Asn
 275 280 285
 Ile Ser Ser Asn Thr Phe His Cys Phe Ser Gly Leu Gln Glu Leu Asp
 290 295 300
 Leu Thr Ala Thr His Leu Ser Glu Leu Pro Ser Gly Leu Val Gly Leu
 305 310 315 320
 Ser Thr Leu Lys Lys Leu Val Leu Ser Ala Asn Lys Phe Glu Asn Leu
 325 330 335
 Cys Gln Ile Ser Ala Ser Asn Phe Pro Ser Leu Thr His Leu Ser Ile
 340 345 350
 Lys Gly Asn Thr Lys Arg Leu Glu Leu Gly Thr Gly Cys Leu Glu Asn
 355 360 365
 Leu Glu Asn Leu Arg Glu Leu Asp Leu Ser His Asp Asp Ile Glu Thr
 370 375 380
 Ser Asp Cys Cys Asn Leu Gln Leu Arg Asn Leu Ser His Leu Gln Ser
 385 390 395 400
 Leu Asn Leu Ser Tyr Asn Glu Pro Leu Ser Leu Lys Thr Glu Ala Phe
 405 410 415
 Lys Glu Cys Pro Gln Leu Glu Leu Leu Asp Leu Ala Phe Thr Arg Leu
 420 425 430
 Lys Val Lys Asp Ala Gln Ser Pro Phe Gln Asn Leu His Leu Leu Lys
 435 440 445

Val Leu Asn Leu Ser His Ser Leu Leu Asp Ile Ser Ser Glu Gln Leu
450 455 460

Phe Asp Gly Leu Pro Ala Leu Gln His Leu Asn Leu Gln Gly Asn His
465 470 475 480

Phe Pro Lys Gly Asn Ile Gln Lys Thr Asn Ser Leu Gln Thr Leu Glv
485 490 495

Arg Leu Glu Ile Leu Val Leu Ser Phe Cys Asp Leu Ser Ser Ile Asp
500 505 510

Gln His Ala Phe Thr Ser Leu Lys Met Met Asn His Val Asp Leu Ser
515 520 525

His Asn Arg Leu Thr Ser Ser Ser Ile Glu Ala Leu Ser His Leu Lys
530 535 540

Gly Ile Tyr Leu Asn Leu Ala Ser Asn His Ile Ser Ile Ile Leu Pro
545 550 555 560

Ser Leu Leu Pro Ile Leu Ser Gln Gln Arg Thr Ile Asn Leu Arg Gln
565 570 575

Asn Pro Leu Asp Cys Thr Cys Ser Asn Ile Tyr Phe Leu Glu Trp Tyr
580 585 590

Lys Glu Asn Met Gln Lys Leu Glu Asp Thr Glu Asp Thr Leu Cys Glu
595 600 605

Asn Pro Pro Leu Leu Arg Gly Val Arg Leu Ser Asp Val Thr Leu Ser
610 615 620

Cys Ser Met Ala Ala Val Gly Ile Phe Phe Leu Ile Val Phe Leu Leu
625 630 635 640

Val Phe Ala Ile Leu Leu Ile Phe Ala Val Lys Tyr Phe Leu Arg Trp
645 650 655

Lys Tyr Gln His Ile
660

<210> 136

<211> 25

<212> PRT

<213> Homo sapiens

<400> 136

Asn Leu Glu Glu Leu Asp Leu Ser Asn Asn Asn Leu Ser Gly Ser Leu
1 5 10 15

Pro Pro Glu Ser Phe Gly Asn Leu Pro
20 25

<210> 137
 <211> 25
 <212> PRT
 <213> Homo sapiens

<400> 137
 Asn Leu Glu Glu Leu Asp Leu Ser Asn Asn Asn Leu Ser Gly Ser Leu
 1 5 10 15
 Pro Pro Glu Ser Phe Gly Asn Leu Pro
 20 25

<210> 138
 <211> 25
 <212> PRT
 <213> Homo sapiens

<400> 138
 Asn Leu Glu Glu Leu Asp Leu Ser Asn Asn Asn Leu Ser Gly Ser Leu
 1 5 10 15
 Pro Pro Glu Ser Phe Gly Asn Leu Pro
 20 25

<210> 139
 <211> 25
 <212> PRT
 <213> Homo sapiens

<400> 139
 Asn Leu Glu Glu Leu Asp Leu Ser Asn Asn Asn Leu Ser Gly Ser Leu
 1 5 10 15
 Pro Pro Glu Ser Phe Gly Asn Leu Pro
 20 25

<210> 140
 <211> 54
 <212> PRT
 <213> Homo sapiens

<400> 140
 Asn Pro Phe Asn Cys Asp Cys Glu Leu Arg Trp Leu Leu Arg Trp Leu
 1 5 10 15
 Arg Glu Thr Asn Pro Arg Arg Leu Glu Asp Gln Glu Asp Leu Arg Cys
 20 25 30
 Ala Ser Pro Glu Ser Leu Arg Gly Gln Pro Leu Leu Glu Leu Leu Pro
 35 40 45

Ser Asp Phe Ser Cys Pro
 50

<210> 141
 <211> 330
 <212> PRT
 <213> Homo sapiens

<400> 141
 Met Pro Gly Pro Ala Thr Asp Ala Gly Lys Ile Pro Phe Cys Asp Ala
 1 5 10 15
 Lys Glu Glu Ile Arg Ala Gly Leu Glu Ser Ser Glu Gly Gly Gly Gly
 20 25 30
 Pro Glu Arg Pro Gly Ala Arg Gly Gln Arg Gln Asn Ile Val Trp Arg
 35 40 45
 Asn Val Val Leu Met Ser Leu Leu His Leu Gly Ala Val Tyr Ser Leu
 50 55 60
 Val Leu Ile Pro Lys Ala Lys Pro Leu Thr Leu Leu Trp Ala Tyr Phe
 65 70 75 80
 Cys Phe Leu Leu Ala Ala Leu Gly Val Thr Ala Gly Ala His Arg Leu
 85 90 95
 Trp Ser His Arg Ser Tyr Arg Ala Lys Leu Pro Leu Arg Ile Phe Leu
 100 105 110
 Ala Val Ala Asn Ser Met Ala Phe Gln Asn Asp Ile Phe Glu Trp Ser
 115 120 125
 Arg Asp His Arg Ala His His Lys Tyr Ser Glu Thr Asp Ala Asp Pro
 130 135 140
 His Asn Ala Arg Arg Gly Phe Phe Phe Ser His Ile Gly Trp Leu Phe
 145 150 155 160
 Val Arg Lys His Arg Asp Val Ile Glu Lys Gly Arg Lys Leu Asp Val
 165 170 175
 Thr Asp Leu Leu Ala Asp Pro Val Val Arg Ile Gln Arg Lys Tyr Tyr
 180 185 190
 Lys Ile Ser Val Val Leu Met Cys Phe Val Val Pro Thr Leu Val Pro
 195 200 205
 Trp Tyr Ile Trp Gly Glu Ser Leu Trp Asn Ser Tyr Phe Leu Ala Ser
 210 215 220
 Ile Leu Arg Tyr Thr Ile Ser Leu Asn Ile Ser Trp Leu Val Asn Ser
 225 230 235 240
 Ala Ala His Met Tyr Gly Asn Arg Pro Tyr Asp Lys His Ile Ser Pro
 245 250 255
 Arg Gln Asn Pro Leu Val Ala Leu Gly Ala Ile Gly Glu Gly Phe His
 260 265 270

Asn Tyr His His Thr Phe Pro Phe Asp Tyr Ser Ala Ser Glu Phe Gly
275 280 285

Leu Asn Phe Asn Pro Thr Thr Trp Phe Ile Asp Phe Met Cys Trp Leu
290 295 300

Gly Leu Ala Thr Asp Arg Lys Arg Ala Thr Lys Pro Met Ile Glu Ala
305 310 315 320

Arg Lys Ala Arg Thr Gly Asp Ser Ser Ala
325 330

<210> 142

<211> 357

<212> PRT

<213> Gallus gallus

<400> 142

Met Pro Ala His Leu Leu Gln Glu Glu Phe Ser Ser Ala Ser Ser
1 5 10 15

Thr Thr Thr Val Thr Ser Arg Val Thr Lys Asn Gly Asn Val Ile Met
20 25 30

Glu Lys Asp Leu Leu Asn His Asp Asp Val Ala Ala Glu Arg Gly Met
35 40 45

Val Asp Asp Leu Phe Asp Glu Thr Tyr Arg Glu Lys Glu Gly Pro Lys
50 55 60

Pro Pro Leu Arg Tyr Val Trp Arg Asn Ile Ile Leu Met Ser Leu Leu
65 70 75 80

His Leu Gly Ala Ile Ile Gly Leu Thr Leu Ile Pro Ser Ala Lys Ile
85 90 95

Gln Thr Leu Ala Trp Ala Ile Leu Cys Phe Val Leu Ser Ala Leu Gly
100 105 110

Ile Thr Ala Gly Ser His Arg Leu Trp Ser His Arg Ser Tyr Lys Ala
115 120 125

Thr Leu Pro Leu Arg Ile Phe Leu Thr Ile Ala Asn Ser Met Ala Phe
130 135 140

Gln Asn Asp Ile Tyr Glu Trp Ala Arg Asp His Arg Val His His Lys
145 150 155 160

Phe Ser Glu Thr His Ala Asp Pro His Asn Ala Met Arg Gly Tyr Phe
165 170 175

Phe Ser His Met Ala Trp Leu Leu Val Arg Lys His Pro Asp Val Ile
180 185 190

Glu Lys Gly Gln Lys Leu Asp Leu Ser Asp Leu Lys Ala Asp Lys Val

195 200 205
 Val Met Phe Gln Arg Arg Tyr Tyr Lys Pro Ser Val Val Leu Leu Cys
 210 215 220
 Phe Thr Leu Pro Thr Leu Val Pro Trp Tyr Phe Trp Asp Glu Ser Ile
 225 230 235 240
 Ile Ile Ser Phe Phe Ile Pro Ala Ile Leu Arg Tyr Thr Leu Gly Leu
 245 250 255
 Asn Ala Thr Trp Leu Val Asn Ser Ala Ala His Met Phe Gly Asn Arg
 260 265 270
 Pro Tyr Asp Gln Asn Ile Asn Pro Arg Glu Asn Pro Leu Val Ser Val
 275 280 285
 Gly Ala Leu Gly Glu Gly Phe His Asn Tyr His His Thr Phe Pro Tyr
 290 295 300
 Asp Tyr Ser Thr Ser Glu Phe Gly Trp Arg Phe Asn Leu Thr Thr Ala
 305 310 315 320
 Phe Ile Asp Leu Met Cys Leu Leu Gly Leu Ala Ser Asp Arg Lys Lys
 325 330 335
 Val Ser Lys Glu Val Ile Leu Ala Arg Lys Met Arg Thr Gly Asp Gly
 340 345 350
 Ser His Lys Ser Gly
 355

<210> 143
 <211> 324
 <212> PRT
 <213> Ctenopharyngodon idella

<400> 143
 Met Pro Asp Met Asp Ile Lys Ala Gln Ala Arg Arg Ala Glu Thr Val
 1 5 10 15
 Glu Asp Val Phe Asp His Thr Tyr Lys Glu Lys Glu Gly Pro Lys Pro
 20 25 30
 Pro Ile Val Val Val Trp Arg Asn Val Ile Leu Met Thr Leu Leu His
 35 40 45
 Thr Gly Ala Leu Tyr Gly Leu Leu Leu Ile Pro Ser Ala Ser Phe Leu
 50 55 60
 Thr Leu Ile Trp Thr Phe Ala Cys Phe Val Tyr Ser Ala Leu Gly Ile
 65 70 75 80
 Thr Ala Gly Ala His Arg Leu Trp Ser His Arg Ser Tyr Lys Ala Ser
 85 90 95

Leu Pro Leu Arg Ile Phe Leu Ala Phe Ala Asn Ser Met Ala Phe Gln
 105 105 110
 Asn Asp Ile Tyr Glu Trp Ser Arg Asp His Arg Val His His Lys Tyr
 115 120 125
 Ser Glu Thr Asp Ala Asp Pro His Asn Ala Val Arg Gly Phe Phe Phe
 130 135 140
 Ala His Ile Gly Trp Leu Leu Val Arg Lys His Pro Asp Val Ile Glu
 145 150 155 160
 Lys Gly Arg Lys Leu Glu Ile Ser Asp Leu Lys Ala Asp Lys Val Val
 165 170 175
 Met Phe Gln Arg Arg His Tyr Lys Pro Ser Val Leu Leu Met Cys Phe
 180 185 190
 Phe Val Pro Met Phe Val Pro Trp Phe Phe Trp Gly Glu Thr Leu Trp
 195 200 205
 Val Ala Tyr Phe Val Pro Thr Val Leu Arg Tyr Thr Leu Val Leu Asn
 210 215 220
 Ala Thr Trp Leu Val Asn Ser Ala Ala His Met Trp Gly Asn Arg Pro
 225 230 235 240
 Tyr Asp Ser Thr Ile Asn Pro Arg Glu Asn Arg Phe Val Thr Phe Ser
 245 250 255
 Ala Ile Gly Glu Gly Phe His Asn Tyr His His Thr Phe Pro Phe Asp
 260 265 270
 Tyr Ser Thr Ser Glu Tyr Gly Trp Lys Leu Asn Leu Thr Thr Cys Phe
 275 280 285
 Ile Asp Leu Met Cys Phe Leu Gly Leu Ala Ser Asp Pro Lys Arg Val
 290 295 300
 Ser Arg Glu Ala Val Leu Ala Arg Val Gln Arg Thr Gly Asp Gly Ser
 305 310 315 320
 His Arg Ser Gly

<210> 144
 <211> 327
 <212> PRT
 <213> Cyprinus carpio

<400> 144
 Met Pro Asp Arg Glu Ile Lys Ser Pro Ile Trp His Pro Glu Pro Gly
 1 5 10 15
 Thr Val Glu Asp Val Phe Asp His Thr Tyr Lys Glu Lys Glu Gly Pro
 20 25 30

Lys Pro Pro Thr Val Ile Val Trp Arg Asn Val Ile Leu Met Ser Leu
 35 40 45
 Leu His Leu Gly Ala Leu Tyr Gly Leu Phe Leu Phe Pro Ser Ala Arg
 50 55 60
 Ala Leu Thr Trp Ile Trp Phe Phe Gly Cys Leu Leu Phe Ser Ala Leu
 65 70 75 80
 Gly Ile Thr Ala Gly Ala His Arg Leu Trp Ser His Arg Ser Tyr Lys
 85 90 95
 Ala Ser Leu Pro Leu Gln Ile Phe Leu Ala Leu Gly Asn Ser Met Ala
 100 105 110
 Phe Gln Asn Asp Ile Tyr Glu Trp Ser Arg Asp His Arg Val His His
 115 120 125
 Lys Tyr Ser Glu Thr Asp Ala Asp Pro His Asn Ala Val Arg Gly Phe
 130 135 140
 Phe Phe Ser His Val Gly Trp Leu Leu Val Arg Lys His Pro Asp Val
 145 150 155 160
 Ile Glu Lys Gly Arg Lys Leu Glu Leu Ser Asp Leu Lys Ala Asp Lys
 165 170 175
 Val Val Met Phe Gln Arg Arg Phe Tyr Lys Pro Ser Val Leu Leu Met
 180 185 190
 Cys Phe Phe Val Pro Thr Phe Val Pro Trp Tyr Val Trp Gly Glu Ser
 195 200 205
 Leu Trp Val Ala Tyr Phe Val Pro Ala Leu Leu Arg Tyr Ala Leu Val
 210 215 220
 Leu Asn Ala Thr Trp Leu Val Asn Ser Ala Ala His Met Trp Gly Asn
 225 230 235 240
 Arg Pro Tyr Asp Ser Ser Ile Asn Pro Arg Glu Asn Arg Phe Val Thr
 245 250 255
 Phe Ser Ala Ile Gly Glu Gly Phe His Asn Tyr His His Thr Phe Pro
 260 265 270
 Phe Asp Tyr Ala Thr Ser Glu Phe Gly Cys Lys Leu Asn Leu Thr Thr
 275 280 285
 Cys Cys Phe Ile Asp Leu Met Cys Phe Leu Gly Leu Ala Arg Glu Pro
 290 295 300
 Lys Arg Val Ser Arg Glu Ala Val Leu Ala Arg Ala Gln Arg Thr Gly
 305 310 315 320
 Asp Gly Ser His Trp Ser Gly
 325

1111> 145
 1111> 324
 1111> PRT
 1113> Cyprinus carpio

1400> 145
 Met Pro Asp Arg Asp Ile Lys Ser Pro Ile Trp His Pro Glu Thr Val
 1 5 10 15
 Glu Asp Val Phe Asp His Thr Tyr Lys Glu Lys Glu Gly Pro Lys Pro
 20 25 30
 Pro Thr Val Ile Val Trp Arg Asn Val Leu Leu Met Ala Phe Leu His
 35 40 45
 Thr Gly Ala Leu Tyr Gly Leu Val Leu Phe Pro Ser Ala Ser Val Leu
 50 55 60
 Thr Trp Ile Trp Phe Leu Ala Cys Phe Val Phe Ser Ala Leu Gly Val
 65 70 75 80
 Thr Ala Gly Ala His Arg Leu Trp Ser Arg Arg Ser Tyr Lys Ala Ser
 85 90 95
 Leu Pro Leu Arg Ile Phe Leu Ala Phe Ala Asn Ser Met Gly Phe Gln
 100 105 110
 Asn Asp Ile Tyr Glu Trp Ser Arg Asp His Arg Val His His Lys Tyr
 115 120 125
 Ser Glu Thr Asp Ala Asp Pro His Asn Ala Val Arg Gly Phe Phe Phe
 130 135 140
 Ser His Ile Gly Trp Leu Leu Val Arg Lys His Pro Asp Val Ile Glu
 145 150 155 160
 Lys Gl, Arg Lys Leu Glu Leu Ser Asp Leu Lys Ala Asp Lys Val Val
 165 170 175
 Met Phe Gln Arg Arg Phe Tyr Lys Ser Ser Val Leu Leu Met Cys Phe
 180 185 190
 Phe Val Pro Thr Phe Val Pro Trp Tyr Val Trp Gly Glu Ser Leu Trp
 195 200 205
 Val Ala Tyr Phe Val Pro Ala Val Leu Arg Tyr Ala Leu Val Leu Asn
 210 215 220
 Ala Thr Trp Leu Val Asn Ser Ala Ala His Met Trp Gly Asn Arg Pro
 225 230 235 240
 Tyr Asp Ser Ser Ile Asn Pro Arg Glu Asn Arg Phe Val Ala Phe Ser
 245 250 255
 Ala Ile Gly Glu Gly Phe His Asn Tyr His His Thr Phe Pro Phe Asp

260 265 270
 Tyr Ala Thr Ser Glu Phe Gly Cys Lys Leu Asn Leu Thr Thr Cys Phe
 275 280 285
 Ile Asp Leu Met Cys Phe Leu Gly Leu Ala Arg Glu Pro Lys Arg Val
 290 295 300
 Ser Arg Glu Ala Ala Leu Ala Arg Ala Gln Arg Thr Gly Asp Gly Ser
 305 310 315 320
 His Arg Thr Gly

<210> 146
 <211> 248
 <212> PRT
 <213> Homo sapiens

<400> 146
 Ile Leu Leu Gly Ala Leu His Leu Gly Ala Leu Tyr Leu Leu Ala Leu
 1 5 10 15
 Leu Pro Thr Glu Leu Lys Trp Lys Thr Val Ile Val Ala Leu Leu Leu
 20 25 30
 Tyr Val Ile Thr Gly Gly Leu Gly Ile Thr Ala Gly Tyr His Arg Leu
 35 40 45
 Trp Ser His Arg Ser Tyr Lys Ala Lys Leu Pro Leu Arg Ile Phe Leu
 50 55 60
 Ala Ile Phe Gly Thr Leu Ala Val Gln Gly Ser Ile Tyr Glu Trp Ala
 65 70 75 80
 Arg Asp His Arg Ala His His Lys Tyr Ser Asp Thr Asp Ala Asp Pro
 85 90 95
 His Asp Ala Asn Arg Gly Phe Phe Phe Ser His Val Gly Trp Leu Leu
 100 105 110
 Val Lys Lys His Pro Ala Val Lys Glu Lys Gly Lys Lys Leu Asp Leu
 115 120 125
 Ser Asp Leu Lys Ala Asp Pro Val Val Arg Phe Gln His Arg Tyr Tyr
 130 135 140
 Ile Pro Leu Met Val Leu Met Gly Phe Ile Leu Pro Thr Leu Val Pro
 145 150 155 160
 Gly Tyr Leu Trp Gly Glu Thr Phe Trp Gly Gly Phe Val Trp Ala Gly
 165 170 175
 Phe Leu Arg Leu Val Phe Val Leu His Ala Thr Trp Cys Val Asn Ser
 180 185 190

Ala Ala His Lys Phe Gly Tyr Arg Pro Tyr Asp Ser Arg Ile Thr Pro
195 200 205

Arg Asn Asn Trp Leu Val Ala Leu Val Thr Phe Gly Glu Gly Trp His
210 215 220

Asn Phe His His Thr Phe Pro Tyr Asp Tyr Arg Asn Ala Glu Lys Trp
225 230 235 240

Lys Trp Glu Tyr Asn Leu Thr Lys
245

<210> 147

<211> 389

<212> PRT

<213> Homo sapiens

<400> 147

Met Leu Glu Glu Pro Arg Pro Arg Pro Pro Ser Gly Leu Ala Gly
1 5 10 15

Leu Leu Phe Leu Ala Leu Cys Ser Arg Ala Leu Ser Asn Glu Ile Leu
20 25 30

Gly Leu Lys Leu Pro Gly Glu Pro Pro Leu Thr Ala Asn Thr Val Cys
35 40 45

Leu Thr Leu Ser Gly Leu Ser Lys Arg Gln Leu Gly Leu Cys Leu Arg
50 55 60

Asn Pro Asp Val Thr Ala Ser Ala Leu Gln Gly Leu His Ile Ala Val
65 70 75 80

His Glu Cys Gln His Gln Leu Arg Asp Gln Arg Trp Asn Cys Ser Ala
85 90 95

Leu Glu Gly Gly Gly Arg Leu Pro His His Ser Ala Ile Leu Lys Arg
100 105 110

Gly Phe Arg Glu Ser Ala Phe Ser Phe Ser Met Leu Ala Ala Gly Val
115 120 125

Met His Ala Val Ala Thr Ala Cys Ser Leu Gly Lys Leu Val Ser Cys
130 135 140

Gly Cys Gly Trp Lys Gly Ser Gly Glu Gln Asp Arg Leu Arg Ala Lys
145 150 155 160

Leu Leu Gln Leu Gln Ala Leu Ser Arg Gly Lys Ser Phe Pro His Ser
165 170 175

Leu Pro Ser Pro Gly Pro Gly Ser Ser Pro Ser Pro Gly Pro Gln Asp
180 185 190

Thr Trp Glu Trp Gly Gly Cys Asn His Asp Met Asp Phe Gly Glu Lys
195 200 205

Phe Ser Arg Asp Phe Leu Asp Ser Arg Glu Ala Pro Arg Asp Ile Gln
210 215 220

Ala Arg Met Arg Ile His Asn Asn Arg Val Gly Arg Gln Val Val Thr
225 230 235 240

Glu Asn Leu Lys Arg Lys Cys Lys Cys His Glv Thr Ser Glv Ser Cys
245 250 255

Gln Phe Lys Thr Cys Trp Arg Ala Ala Pro Glu Phe Arg Ala Val Gly
260 265 270

Ala Ala Leu Arg Glu Arg Leu Gly Arg Ala Ile Phe Ile Asp Thr His
275 280 285

Asn Arg Asn Ser Gly Ala Phe Gln Pro Arg Leu Arg Pro Arg Arg Leu
290 295 300

Ser Gly Glu Leu Val Tyr Phe Glu Lys Ser Pro Asp Phe Cys Glu Arg
305 310 315 320

Asp Pro Thr Met Gly Ser Pro Gly Thr Arg Gly Arg Ala Cys Asn Lys
325 330 335

Thr Ser Arg Leu Leu Asp Gly Cys Gly Ser Leu Cys Cys Gly Arg Gly
340 345 350

His Asn Val Leu Arg Gln Thr Arg Val Glu Arg Cys His Cys Arg Phe
355 360 365

His Trp Cys Cys Tyr Val Leu Cys Asp Glu Cys Lys Val Thr Glu Trp
370 375 380

Val Asn Val Cys Lys
385

<210> 148

<211> 389

<212> PRT

<213> Homo sapiens

<400> 148

Met Leu Glu Glu Pro Arg Pro Arg Pro Pro Ser Gly Leu Ala Gly
1 5 10 15

Leu Leu Phe Leu Ala Leu Cys Ser Arg Ala Leu Ser Asn Glu Ile Leu
20 25 30

Gly Leu Lys Leu Pro Gly Glu Pro Pro Leu Thr Ala Asn Thr Val Cys
35 40 45

Leu Thr Leu Ser Gly Leu Ser Lys Arg Gln Leu Asp Leu Cys Leu Arg
50 55 60

Asn Pro Asp Val Thr Ala Ser Ala Leu Gln Gly Leu His Ile Ala Val

65		70		75		80
His Glu Cys Gln	His Gln Leu Arg Asp Gln Arg Trp Asn Cys Ser Ala					
	85			90		95
Leu Glu Gly Gly Gly Arg Leu Pro His His Ser Ala Ile Leu Lys Arg						
	100			105		110
Gly Phe Arg Glu Ser Ala Phe Ser Phe Ser Met Leu Ala Ala Gly Val						
	115			120		125
Met His Ala Val Ala Thr Ala Cys Ser Leu Gly Lys Leu Val Ser Cys						
	130			135		140
Gly Cys Gly Trp Lys Gly Ser Gly Glu Gln Asp Arg Leu Arg Ala Lys						
	145			150		155
Leu Leu Gln Leu Gln Ala Leu Ser Arg Gly Lys Ser Phe Pro His Ser						
	165			170		175
Leu Pro Ser Pro Gly Pro Gly Ser Ser Pro Ser Pro Gly Pro Gln Asp						
	180			185		190
Thr Trp Glu Trp Gly Gly Cys Asn His Asp Met Asp Phe Gly Glu Lys						
	195			200		205
Phe Ser Arg Asp Phe Leu Asp Ser Arg Glu Ala Pro Arg Asp Ile Gln						
	210			215		220
Ala Arg Met Arg Ile His Asn Asn Arg Val Gly Arg Gln Val Val Thr						
	225			230		235
Glu Asn Leu Lys Arg Lys Cys Lys Cys His Gly Thr Ser Gly Ser Cys						
	245			250		255
Gln Phe Lys Thr Cys Trp Arg Ala Ala Pro Glu Phe Arg Ala Val Gly						
	260			265		270
Ala Ala Leu Arg Glu Arg Leu Gly Arg Ala Ile Phe Ile Asp Thr His						
	275			280		285
Asn Arg Asn Ser Gly Ala Phe Gln Pro Arg Leu Arg Pro Arg Arg Leu						
	290			295		300
Ser Gly Glu Leu Val Tyr Phe Glu Lys Ser Pro Asp Phe Cys Glu Arg						
	305			310		315
Asp Pro Thr Met Gly Ser Pro Gly Thr Arg Gly Arg Ala Cys Asn Lys						
	325			330		335
Thr Ser Arg Leu Leu Asp Gly Cys Gly Ser Leu Cys Cys Gly Arg Gly						
	340			345		350
His Asn Val Leu Arg Gln Thr Arg Val Glu Arg Cys His Cys Arg Phe						
	355			360		365
His Trp Cys Cys Tyr Val Leu Cys Asp Glu Cys Lys Val Thr Glu Trp						

370

375

380

Val Asn Val Cys Lys

385

<210> 149

<211> 389

<212> PRT

<213> Mus musculus

<400> 149

Met Leu Glu Glu Pro Arg Ser Arg Pro Pro Pro Leu Gly Leu Ala Gly
1 5 10 15Leu Leu Phe Leu Ala Leu Phe Ser Arg Ala Leu Ser Asn Glu Ile Leu
20 25 30Gly Leu Lys Leu Pro Gly Glu Pro Pro Leu Thr Ala Asn Thr Val Cys
35 40 45Leu Thr Leu Ser Gly Leu Ser Lys Arg Gln Leu Gly Leu Cys Leu Arg
50 55 60Ser Pro Asp Val Thr Ala Ser Ala Leu Gln Gly Leu His Ile Ala Val
65 70 75 80His Glu Cys Gln His Gln Leu Arg Asp Gln Arg Trp Asn Cys Ser Ala
85 90 95Leu Glu Gly Gly Gly Arg Leu Pro His His Ser Ala Ile Leu Lys Arg
100 105 110Gly Phe Arg Glu Ser Ala Phe Ser Phe Ser Met Leu Ala Ala Gly Val
115 120 125Met His Ala Val Ala Thr Ala Cys Ser Leu Gly Lys Leu Val Ser Cys
130 135 140Gly Cys Gly Trp Lys Gly Ser Gly Glu Gln Asp Arg Leu Arg Ala Lys
145 150 155 160Leu Leu Gln Leu Gln Ala Leu Ser Arg Gly Lys Thr Phe Pro Ile Ser
165 170 175Gln Pro Ser Pro Val Pro Gly Ser Val Pro Ser Pro Gly Pro Gln Asp
180 185 190Thr Trp Glu Trp Gly Gly Cys Asn His Asp Met Asp Phe Gly Glu Lys
195 200 205Phe Ser Arg Asp Phe Leu Asp Ser Arg Glu Ala Pro Arg Asp Ile Gln
210 215 220Ala Arg Met Arg Ile His Asn Asn Arg Val Gly Arg Gln Val Val Thr
225 230 235 240

Gly Phe Arg Glu Ser Ala Phe Ser Leu Ala Met Leu Ala Ala Gly Val
 115 120 125
 Ala His Ser Val Ala Ser Ala Cys Ser Met Gly Lys Leu Arg Gly Cys
 130 135 140
 Gly Cys Glu Ala Lys Arg Arg Gln Asp Asp Asp Lys Ile Arg Leu Lys
 145 150 155 160
 Leu Thr Gln Leu Gln Leu Gln Ser Leu Gln Lys Asp Asp Leu Ser Ser
 165 170 175
 Met Gln Glu Thr Trp Glu Trp Gly Gly Cys Ser His Asp Val Arg Tyr
 180 185 190
 Gly Asp Arg Phe Ser Arg Asp Trp Leu Asp Ser Arg Gly Ser Pro Arg
 195 200 205
 Asp Ile His Ala Arg Met Lys Ile His Asn Asn Arg Val Gly Arg Gln
 210 215 220
 Ile Val Thr Asp Asn Met Lys Arg Lys Cys Lys Cys His Gly Thr Ser
 225 230 235 240
 Gly Ser Cys Gln Phe Gln Thr Cys Trp His Val Ser Pro Glu Phe Arg
 245 250 255
 Leu Val Gly Ser Leu Leu Lys Glu Lys Phe Leu Ser Ala Ile Leu Val
 260 265 270
 Asn Ser Gln Asn Lys Asn Asn Gly Val Phe Asn Pro Arg Ile Gly Ser
 275 280 285
 Gly Val Ser Gly Ser Thr Gly Gly Leu Asn Gly Gly Arg Arg Arg Ser
 290 295 300
 Met Ser Arg Glu Leu Val Tyr Phe Glu Lys Ser Pro Asp Phe Cys Glu
 305 310 315 320
 Pro Asn Leu Ser Val Asp Ser Ala Gly Thr Gln Gly Arg Ile Cys Asn
 325 330 335
 Lys Thr Ser Gln Ser Thr Asp Ser Cys Gly Ser Leu Cys Cys Gly Arg
 340 345 350
 Gly His Asn Ile Leu Lys Lys Thr His Ser Glu Arg Cys Asn Cys Arg
 355 360 365
 Phe His Trp Cys Cys Tyr Val Leu Cys Glu Glu Cys Arg Leu Thr Glu
 370 375 380
 Trp Val Asn Val Cys Lys
 385 390

<210> 151

<211> 417
 <212> PPT
 <213> Mus musculus

<400> 151

Met	Gly	Ser	Ala	His	Pro	Arg	Pro	Trp	Leu	Arg	Leu	Pro	Gln	Gly	Pro
1				5					10					15	
Gln	Pro	Arg	Pro	Glu	Phe	Trp	Ala	Leu	Leu	Phe	Phe	Leu	Leu	Leu	Leu
			20					25					30		
Ala	Ala	Ala	Val	Pro	Arg	Ser	Ala	Pro	Asn	Asp	Ile	Leu	Gly	Leu	Arg
		35					40						45		
Leu	Pro	Pro	Glu	Pro	Val	Leu	Asn	Ala	Asn	Thr	Val	Cys	Leu	Thr	Leu
	50					55					60				
Pro	Gly	Leu	Ser	Arg	Arg	Gln	Met	Glu	Val	Cys	Val	Arg	His	Pro	Asp
65					70					75					80
Val	Ala	Ala	Ser	Ala	Ile	Gln	Gly	Ile	Gln	Ile	Ala	Ile	His	Glu	Cys
				85					90					95	
Gln	His	Gln	Phe	Arg	Asp	Gln	Arg	Trp	Asn	Cys	Ser	Ser	Leu	Glu	Thr
			100					105					110		
Arg	Asn	Lys	Val	Pro	Tyr	Glu	Ser	Pro	Ile	Phe	Ser	Arg	Gly	Phe	Arg
		115					120					125			
Glu	Ser	Ala	Phe	Ala	Tyr	Ala	Ile	Ala	Ala	Ala	Gly	Val	Val	His	Ala
	130					135					140				
Val	Ser	Asn	Ala	Cys	Ala	Leu	Gly	Lys	Leu	Lys	Ala	Cys	Gly	Cys	Asp
145					150					155					160
Ala	Ser	Arg	Arg	Gly	Asp	Glu	Glu	Ala	Phe	Arg	Arg	Lys	Leu	His	Arg
				165					170					175	
Leu	Gln	Leu	Asp	Ala	Leu	Gln	Arg	Gly	Lys	Gly	Leu	Ser	His	Gly	Val
			180					185					190		
Pro	Glu	His	Pro	Ala	Ile	Leu	Pro	Ala	Ser	Pro	Gly	Leu	Gln	Asp	Ser
		195					200					205			
Trp	Glu	Trp	Gly	Gly	Cys	Ser	Pro	Asp	Val	Gly	Phe	Gly	Glu	Arg	Phe
	210					215					220				
Ser	Lys	Asp	Phe	Leu	Asp	Ser	Arg	Glu	Pro	His	Arg	Asp	Ile	His	Ala
225					230					235					240
Arg	Met	Arg	Leu	His	Asn	Asn	Arg	Val	Gly	Arg	Gln	Ala	Val	Met	Glu
				245					250					255	
Asn	Met	Arg	Arg	Lys	Cys	Lys	Cys	His	Gly	Thr	Ser	Gly	Ser	Cys	Gln
		260						265					270		
Leu	Lys	Thr	Cys	Trp	Gln	Val	Thr	Pro	Glu	Phe	Arg	Thr	Val	Gly	Ala

275					280					285					
Leu	Leu	Arg	Asn	Arg	Phe	His	Arg	Ala	Thr	Leu	Ile	Arg	Pro	His	Asn
290					295					300					
Arg	Asn	Gly	Gly	Gln	Leu	Glu	Pro	Gly	Pro	Ala	Gly	Ala	Pro	Ser	Pro
305				310						315					320
Ala	Pro	Gly	Thr	Pro	Gly	Leu	Arg	Arg	Arg	Ala	Ser	His	Ser	Asp	Leu
				325					330					335	
Val	Tyr	Phe	Glu	Lys	Ser	Pro	Asn	Phe	Cys	Glu	Arg	Glu	Pro	Arg	Leu
			340					345					350		
Asp	Ser	Ala	Gly	Thr	Val	Gly	Arg	Leu	Cys	Asn	Lys	Ser	Ser	Thr	Gly
		355					360					365			
Pro	Asp	Gly	Cys	Gly	Ser	Met	Cys	Cys	Gly	Arg	Gly	His	Asn	Ile	Leu
	370					375					380				
Arg	Gln	Thr	Arg	Ser	Glu	Arg	Cys	His	Cys	Arg	Phe	His	Trp	Cys	Cys
385				390					395						400
Phe	Val	Val	Cys	Glu	Glu	Cys	Arg	Ile	Thr	Glu	Trp	Val	Ser	Val	Cys
			405					410						415	

Lys

<210> 152
 <211> 115
 <212> PRT
 <213> Homo sapiens

<400> 152

Leu	Cys	Arg	Ser	Leu	Pro	Gly	Leu	Ser	Pro	Arg	Gln	Arg	Gln	Leu	Cys
1				5					10					15	
Arg	Arg	Asn	Pro	Asp	Val	Met	Ala	Ser	Val	Ser	Glu	Gly	Ala	Gln	Leu
			20					25					30		
Ala	Ile	Gln	Glu	Cys	Gln	His	Gln	Phe	Arg	Gly	Arg	Arg	Trp	Asn	Cys
		35					40					45			
Ser	Thr	Leu	Asp	Ser	Leu	Asn	Glu	Arg	Ser	Val	Phe	Gly	Lys	Val	Leu
	50					55					60				
Lys	Lys	Gly	Thr	Arg	Glu	Thr	Ala	Phe	Val	Tyr	Ala	Ile	Ser	Ser	Ala
65					70					75					80
Gly	Val	Ala	His	Ala	Val	Thr	Arg	Ala	Cys	Ser	Glu	Gly	Glu	Leu	Glu
			85						90					95	
Ser	Cys	Gly	Cys	Asp	Asp	Lys	Arg	Lys	Ala	Asp	Glu	Glu	Arg	Leu	Arg
			100					105						110	

Ile Lys Leu
115

<210> 153
<211> 85
<212> PPT
<213> Homo sapiens

<400> 153
Met Ser Cys Ser Cys Gly Gly Asn Cys Gly Cys Gly Ser Gly Cys Lys
1 5 10 15
Cys Gly Ser Gly Cys Gly Gly Cys Lys Met Tyr Pro Asp Leu Ser Glu
20 25 30
Thr Thr Ser Ser Thr Thr Thr Glu Ala Thr Thr Leu Val Leu Gly Val
35 40 45
Ala Pro Glu Lys Lys Ala Gln Phe Glu Gly Ser Glu Met Gly Val Ala
50 55 60
Val Ala Ala Glu Glu Asn Gly Cys Lys Cys Gly Ser Asn Cys Lys Cys
65 70 75 80
Asp Pro Cys Asn Cys
85

<210> 154
<211> 193
<212> PRT
<213> Homo sapiens

<400> 154
Arg Asp Arg Asp Ala Arg Ser Leu Met Asn Leu His Asn Asn Glu Ala
1 5 10 15
Gly Arg Lys Ala Val Lys Ser His Met Arg Arg Glu Cys Lys Cys His
20 25 30
Gly Val Ser Gly Ser Cys Ser Leu Lys Thr Cys Trp Leu Ser Leu Pro
35 40 45
Asp Phe Arg Glu Val Gly Asp Leu Leu Lys Glu Lys Tyr Asp Gly Ala
50 55 60
Ile Glu Val Glu Val Asn Lys Arg Gly Lys Gly Gln Arg Ser Leu Ser
65 70 75 80
Ser Arg Lys Gln Ala Ser Ala Leu Glu Ala Ala Asn Glu Arg Phe Lys
85 90 95
Lys Pro Thr Arg Asn Gln Tyr Thr Asp Leu Val Tyr Leu Glu Lys Ser
100 105 110
Pro Asp Tyr Cys Glu Arg Asp Arg Glu Thr Gly Ser Leu Gly Thr Gln

115	120	125
Gly Arg Val Cys Asn Lys Thr Ser Lys Gly Leu Gln Trp Arg Asp Gly		
130	135	140
Cys Glu Leu Leu Cys Cys Gly Arg Gly Tyr Asn Thr Glu Gln Lys Val		
145	150	155
Glu Arg Thr Glu Lys Cys Asn Cys Lys Phe His Asn Gly Trp Cys Cys		
	165	170
Tyr Val Lys Cys Glu Glu Cys Thr Glu Val Val Glu Val His Thr Cys		
	180	185
		190

Lys

<210> 155
 <211> 348
 <212> PRT
 <213> Rattus norvegicus

<400> 155
Met Val Leu Leu Ala Gln Gly Ala Cys Cys Ser Asn Gln Trp Leu Ala
1 5 10 15
Ala Val Leu Leu Ser Leu Cys Ser Cys Leu Pro Ala Gly Gln Ser Val
20 25 30
Asp Phe Pro Trp Ala Ala Val Asp Asn Met Leu Val Arg Lys Gly Asp
35 40 45
Thr Ala Val Leu Arg Cys Tyr Leu Glu Asp Gly Ala Ser Lys Gly Ala
50 55 60
Trp Leu Asn Arg Ser Ser Ile Ile Phe Ala Gly Gly Asp Lys Trp Ser
65 70 75 80
Val Asp Pro Arg Val Ser Ile Ser Thr Leu Asn Lys Arg Asp Tyr Ser
85 90 95
Leu Gln Ile Gln Asn Val Asp Val Thr Asp Asp Gly Pro Tyr Thr Cys
100 105 110
Ser Val Gln Thr Gln His Thr Pro Arg Thr Met Gln Val His Leu Thr
115 120 125
Val Gln Val Pro Pro Lys Ile Tyr Asp Ile Ser Asn Asp Met Thr Ile
130 135 140
Asn Glu Gly Thr Asn Val Thr Leu Thr Cys Leu Ala Thr Gly Lys Pro
145 150 155 160
Glu Pro Ala Ile Ser Trp Arg His Ile Ser Pro Ser Ala Lys Pro Phe
165 170 175

Glu Asn Gly Glu Tyr Leu Asp Ile Tyr Gly Ile Thr Arg Asp Gln Ala
180 185 190

Gly Glu Tyr Glu Cys Ser Ala Glu Asn Asp Val Ser Phe Pro Asp Val
195 200 205

Lys Lys Val Arg Val Val Val Asn Phe Ala Pro Thr Ile Glu Gln Ile
210 215 220

Lys Ser Gly Thr Val Thr Pro Gly Arg Ser Gly Leu Ile Arg Cys Glu
225 230 235 240

Gly Ala Gly Val Pro Pro Pro Ala Phe Glu Trp Tyr Lys Gly Glu Lys
245 250 255

Arg Leu Phe Asn Gly Gln Gln Gly Ile Ile Ile Gln Asn Phe Ser Thr
260 265 270

Arg Ser Ile Leu Thr Val Thr Asn Val Thr Gln Glu His Phe Gly Asn
275 280 285

Tyr Thr Cys Val Ala Ala Asn Lys Leu Gly Thr Thr Asn Ala Ser Leu
290 295 300

Pro Leu Asn Pro Pro Ser Thr Ala Gln Tyr Gly Ile Thr Gly Ser Ala
305 310 315 320

Cys Asp Leu Phe Ser Cys Trp Ser Leu Ala Leu Thr Leu Ser Ser Val
325 330 335

Ile Ser Ile Phe Tyr Leu Lys Asn Ala Ile Leu Gln
340 345

<210> 156

<211> 352

<212> PRT

<213> Gallus gallus

<400> 156

Met Val Pro Leu Val Arg Gly Ala Gly Gly Ser His Gln Trp Leu Ala
1 5 10 15

Ala Val Leu Leu Gly Leu Cys Cys Leu Leu Pro Ala Gly Arg Leu Ala
20 25 30

Ala Pro Gly Gly Asp Phe Pro Gly Ala Ala Ala Asp Ser Leu Val Val
35 40 45

Arg Lys Gly Asp Thr Ala Val Leu Arg Cys Tyr Leu Glu Asp Gly Ala
50 55 60

Ser Lys Gly Ala Trp Leu Asn Arg Ser Ser Ile Ile Phe Ala Gly Ser
65 70 75 80

Asp Lys Trp Ser Val Asp Pro Arg Val Ser Ile Ala Thr Ala Asn Arg
85 90 95

Arg	Glu	Tyr	Ser	Leu	Gln	Ile	Gln	Asp	Val	Asp	Val	Thr	Asp	Asp	Gly	
			100					105					110			
Pro	Tyr	Thr	Cys	Ser	Val	Gln	Thr	Gln	His	Thr	Pro	Arg	Thr	Met	Gln	
		115					120					125				
Val	His	Leu	Thr	Val	Gln	Val	Ser	Pro	Lys	Ile	Phe	Arg	Ile	Ser	Ser	
	130					135					140					
Asp	Ile	Val	Val	Asn	Glu	Gly	Ser	Asn	Val	Thr	Leu	Val	Cys	Leu	Ala	
145					150					155					160	
Thr	Gly	Lys	Pro	Glu	Pro	Ser	Ile	Ser	Trp	Arg	His	Ile	Ser	Pro	Ser	
			165						170					175		
Ala	Lys	Pro	Phe	Glu	Ser	Gly	Gln	Tyr	Leu	Asp	Ile	Tyr	Gly	Ile	Thr	
			180					185					190			
Arg	Asp	Gln	Ala	Gly	Glu	Tyr	Glu	Cys	Ser	Ala	Glu	Asn	Asp	Val	Ser	
		195					200					205				
Val	Pro	Asp	Val	Lys	Lys	Val	Lys	Val	Thr	Val	Asn	Phe	Ala	Pro	Thr	
	210					215					220					
Ile	Gln	Glu	Leu	Lys	Ser	Ser	Gly	Val	Met	Leu	Gly	Gly	Asn	Gly	Leu	
225					230					235					240	
Ile	Arg	Cys	Glu	Gly	Ala	Gly	Val	Pro	Ala	Pro	Val	Phe	Glu	Trp	Tyr	
			245					250						255		
Arg	Gly	Glu	Arg	Lys	Leu	Ile	Ser	Gly	Gln	Gln	Gly	Ile	Thr	Ile	Lys	
			260					265					270			
Asn	Tyr	Ser	Thr	Arg	Ser	Leu	Leu	Thr	Val	Thr	Asn	Val	Thr	Glu	Glu	
		275					280					285				
His	Phe	Gly	Asn	Tyr	Thr	Cys	Val	Ala	Ala	Asn	Lys	Leu	Gly	Met	Thr	
	290					295					300					
Asn	Ala	Ser	Leu	Pro	Leu	Asn	Pro	Pro	Ser	Thr	Ala	Gln	Tyr	Gly	Ile	
305					310					315					320	
Thr	Gly	Asp	Ala	Glu	Val	Leu	Phe	Ser	Cys	Trp	Tyr	Leu	Val	Leu	Thr	
			325						330					335		
Leu	Ser	Ser	Leu	Thr	Ser	Ile	Phe	Tyr	Leu	Lys	Asn	Ile	Ile	Leu	His	
			340					345					350			

<210> 157
 <211> 261
 <212> PRT
 <213> Gallus gallus

<100> 157

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Met Val Pro Leu Val Arg Gly Ala Gly Gly Ser His Gln Trp Leu Ala
  1                               5               10               15

Ala Val Leu Leu Gly Leu Cys Cys Leu Leu Pro Ala Gly Arg Leu Ala
                20                   25               30

Ala Pro Gly Gly Asp Phe Pro Gly Ala Ala Ala Asp Ser Leu Val Val
      35                   40                   45

Arg Lys Gly Asp Thr Ala Val Leu Arg Cys Tyr Leu Glu Asp Gly Ala
      50                   55                   60

Ser Lys Gly Ala Trp Leu Asn Arg Ser Ser Ile Ile Phe Ala Gly Ser
      65                   70                   75                   80

Asp Lys Trp Ser Val Asp Pro Arg Val Ser Ile Ala Thr Ala Asn Arg
                85                   90                   95

Arg Glu Tyr Ser Leu Gln Ile Gln Asp Val Asp Val Thr Asp Asp Gly
      100                   105                   110

Pro Tyr Thr Cys Ser Val Gln Thr Gln His Thr Pro Arg Thr Met Gln
      115                   120                   125

Val His Leu Thr Val Gln Val Ser Pro Lys Ile Phe Arg Ile Ser Ser
      130                   135                   140

Asp Ile Val Val Asn Glu Gly Ser Asn Val Thr Leu Val Cys Leu Ala
      145                   150                   155                   160

Thr Gly Lys Pro Glu Pro Ser Ile Ser Trp Arg His Ile Ser Pro Ser
                165                   170                   175

Ala Lys Pro Phe Glu Ser Gly Gln Tyr Leu Asp Ile Tyr Val Ile Thr
                180                   185                   190

Arg Asp Glu Ala Gly Glu Tyr Glu Cys Ser Ala Glu Asn Asp Val Ser
      195                   200                   205

Val Pro Asp Val Lys Lys Val Lys Val Thr Val Asn Ser Pro Ser Thr
      210                   215                   220

Ala Gln Tyr Gly Ile Thr Gly Asp Ala Glu Val Leu Phe Ser Cys Trp
      225                   230                   235                   240

Tyr Leu Val Leu Thr Leu Ser Ser Leu Thr Ser Ile Phe Tyr Leu Lys
                245                   250                   255

Asn Ile Ile Leu His
      260

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<210> 158

<211> 338

<212> PRT

213. Homo sapiens

400-158

Met	Val	Gly	Arg	Val	Gln	Pro	Asp	Arg	Lys	Gln	Leu	Pro	Leu	Val	Leu
1				5					10					15	
Leu	Arg	Leu	Leu	Cys	Leu	Leu	Pro	Thr	Gly	Leu	Pro	Val	Arg	Ser	Val
		20						25					30		
Asn	Phe	Asn	Arg	Gly	Thr	Asp	Asn	Ile	Thr	Val	Arg	Gln	Gly	Asp	Thr
		35					40					45			
Ala	Ile	Leu	Arg	Cys	Val	Leu	Glu	Asp	Lys	Asn	Ser	Lys	Val	Ala	Trp
	50					55					60				
Leu	Asn	Arg	Ser	Gly	Ile	Ile	Phe	Ala	Gly	His	Asp	Lys	Trp	Ser	Leu
65					70					75					80
Asp	Pro	Arg	Val	Glu	Leu	Glu	Lys	Arg	His	Ser	Leu	Glu	Tyr	Ser	Leu
			85						90					95	
Arg	Ile	Gln	Lys	Val	Asp	Val	Tyr	Asp	Glu	Gly	Ser	Tyr	Thr	Cys	Ser
		100						105					110		
Val	Gln	Thr	Gln	His	Glu	Pro	Lys	Thr	Ser	Gln	Val	Tyr	Leu	Ile	Val
		115					120						125		
Gln	Val	Pro	Pro	Lys	Ile	Ser	Asn	Ile	Ser	Ser	Asp	Val	Thr	Val	Asn
	130					135					140				
Glu	Gly	Ser	Asn	Val	Thr	Leu	Val	Cys	Met	Ala	Asn	Gly	Arg	Pro	Glu
145				150						155					160
Pro	Val	Ile	Thr	Trp	Arg	His	Leu	Thr	Pro	Thr	Gly	Arg	Glu	Phe	Glu
			165						170					175	
Gly	Glu	Glu	Glu	Tyr	Leu	Glu	Ile	Leu	Gly	Ile	Thr	Arg	Glu	Gln	Ser
			180					185					190		
Gly	Lys	Tyr	Glu	Cys	Lys	Ala	Ala	Asn	Glu	Val	Ser	Ser	Ala	Asp	Val
		195					200						205		
Lys	Gln	Val	Lys	Val	Thr	Val	Asn	Tyr	Pro	Pro	Thr	Ile	Thr	Glu	Ser
	210					215					220				
Lys	Ser	Asn	Glu	Ala	Thr	Thr	Gly	Arg	Gln	Ala	Ser	Leu	Lys	Cys	Glu
225				230						235					240
Ala	Ser	Ala	Val	Pro	Ala	Pro	Asp	Phe	Glu	Trp	Tyr	Arg	Asp	Asp	Thr
			245						250					255	
Arg	Ile	Asn	Ser	Ala	Asn	Gly	Leu	Glu	Ile	Lys	Ser	Thr	Glu	Gly	Gln
		260					265						270		
Ser	Ser	Leu	Thr	Val	Thr	Asn	Val	Thr	Glu	Glu	His	Tyr	Gly	Asn	Tyr
		275					280						285		

Thr Cys Val Ala Ala Asn Lys Leu Gly Val Thr Asn Ala Ser Leu Val
290 295 300

Leu Phe Arg Pro Gly Ser Val Arg Gly Ile Asn Gly Ser Ile Ser Leu
305 310 315 320

Ala Val Pro Leu Trp Leu Leu Ala Ala Ser Leu Leu Cys Leu Leu Ser
325 330 335

Lys Cys

<210> 159

<211> 338

<212> PRT

<213> Gallus gallus

<400> 159

Met Val Ala Arg Ala Gln Pro Asp Arg Lys Gln Leu Pro Leu Val Leu
1 5 10 15

Leu Arg Leu Leu Cys Leu Leu Pro Thr Gly Leu Pro Val Arg Ser Val
20 25 30

Asp Phe Thr Arg Gly Thr Asp Asn Ile Thr Val Arg Gln Gly Asp Thr
35 40 45

Ala Ile Leu Arg Cys Phe Val Glu Asp Arg Ser Ser Lys Val Ala Trp
50 55 60

Leu Asn Arg Ser Gly Ile Ile Phe Ala Gly Glu Asp Lys Trp Ser Leu
65 70 75 80

Asp Pro Arg Val Glu Leu Glu Lys Arg Ser Pro Leu Glu Tyr Ser Leu
85 90 95

Arg Ile Gln Lys Val Asp Val Tyr Asp Glu Gly Ser Tyr Thr Cys Ser
100 105 110

Val Gln Thr Gln His His Pro Lys Thr Ser Gln Val Tyr Leu Ile Val
115 120 125

Gln Val Pro Pro Lys Ile Ser Asn Ile Ser Ser Asp Ile Thr Val Asn
130 135 140

Glu Gly Ser Asn Val Thr Leu Val Cys Met Ala Asn Gly Arg Pro Glu
145 150 155 160

Pro Val Ile Thr Trp Arg His Leu Thr Pro Thr Gly Lys Glu Phe Glu
165 170 175

Gly Glu Glu Glu Tyr Leu Glu Ile Leu Gly Ile Thr Arg Glu Gln Ser
180 185 190

Gly Lys Tyr Glu Cys Lys Ala Ala Asn Glu Val Ala Ser Ala Asp Val
195 200 205

Lys Gln Val Arg Val Thr Val Asn Tyr Pro Pro Thr Ile Thr Glu Ser
210 215 220

Lys Ser Asn Glu Ala Ala Thr Gly Arg Gln Ala Leu Leu Arg Cys Glu
225 230 235 240

Ala Ser Ala Val Pro Thr Pro Asp Phe Glu Trp Tyr Arg Asp Asp Thr
245 250 255

Arg Ile Asn Ser Ala Asn Gly Leu Glu Ile Lys Ser Thr Gly Ser Gln
260 265 270

Ser Leu Leu Met Val Ala Asn Val Thr Glu Glu His Tyr Gly Asn Tyr
275 280 285

Thr Cys Val Ala Ala Asn Lys Leu Gly Val Thr Asn Ala Ser Leu Tyr
290 295 300

Leu Tyr Arg Pro Gly Thr Gly Arg Val Asp Asn Gly Ser Val Ser Leu
305 310 315 320

Ala Val Pro Leu Trp Leu Leu Ala Ala Ser Leu Leu Cys Leu Leu Ser
325 330 335

Lys Cys

<210> 160

<211> 45

<212> PRT

<213> Homo sapiens

<400> 160

Gly Glu Ser Val Thr Leu Thr Cys Ser Val Ser Gly Phe Gly Pro Pro
1 5 10 15

Pro Val Thr Trp Leu Arg Asn Gly Lys Leu Ser Leu Thr Ile Ser Val
20 25 30

Thr Pro Glu Asp Ser Gly Gly Thr Tyr Thr Cys Val Val
35 40 45

<210> 161

<211> 45

<212> PRT

<213> Homo sapiens

<400> 161

Gly Glu Ser Val Thr Leu Thr Cys Ser Val Ser Gly Phe Gly Pro Pro
1 5 10 15

Pro Val Thr Trp Leu Arg Asn Gly Lys Leu Ser Leu Thr Ile Ser Val
20 25 30

Thr Pro Glu Asp Ser Gly Gly Thr Tyr Thr Cys Val Val
 35 40 45

<210> 162

<211> 45

<212> PRT

<213> Homo sapiens

<400> 162

Gly Glu Ser Val Thr Leu Thr Cys Ser Val Ser Gly Phe Gly Pro Pro
 1 5 10 15

Pro Val Thr Trp Leu Arg Asn Gly Lys Leu Ser Leu Thr Ile Ser Val
 20 25 30

Thr Pro Glu Asp Ser Gly Gly Thr Tyr Thr Cys Val Val
 35 40 45

<210> 163

<211> 577

<212> PRT

<213> Homo sapiens

<400> 163

Met Gly Ser Arg His Phe Glu Gly Ile Tyr Asp His Val Gly His Phe
 1 5 10 15

Gly Arg Phe Gln Arg Val Leu Tyr Phe Ile Cys Ala Phe Gln Asn Ile
 20 25 30

Ser Cys Gly Ile His Tyr Leu Ala Ser Val Phe Met Gly Val Thr Pro
 35 40 45

His His Val Cys Arg Pro Pro Gly Asn Val Ser Gln Val Val Phe His
 50 55 60

Asn His Ser Asn Trp Ser Leu Glu Asp Thr Gly Ala Leu Leu Ser Ser
 65 70 75 80

Gly Gln Lys Asp Tyr Val Thr Val Gln Leu Gln Asn Gly Glu Ile Trp
 85 90 95

Glu Leu Ser Arg Cys Ser Arg Asn Lys Arg Glu Asn Thr Ser Ser Leu
 100 105 110

Gly Tyr Glu Tyr Thr Gly Ser Lys Lys Glu Phe Pro Cys Val Asp Gly
 115 120 125

Tyr Ile Tyr Asp Gln Asn Thr Trp Lys Ser Thr Ala Val Thr Gln Trp
 130 135 140

Asn Leu Val Cys Asp Arg Lys Trp Leu Ala Met Leu Ile Gln Pro Leu
 145 150 155 160

Phe Met Phe Gly Val Leu Leu Gly Ser Val Thr Phe Gly Tyr Phe Ser

165										170										175										
Asp	Arg	Leu	Gly	Arg	Arg	Val	Val	Leu	Trp	Ala	Thr	Ser	Ser	Ser	Met															
			180					185					190																	
Phe	Leu	Phe	Gly	Ile	Ala	Ala	Ala	Phe	Ala	Val	Asp	Tyr	Tyr	Thr	Phe															
		195					200					205																		
Met	Ala	Ala	Arg	Phe	Phe	Leu	Ala	Met	Val	Ala	Ser	Gly	Tyr	Leu	Val															
	210					215					220																			
Val	Gly	Phe	Val	Tyr	Val	Met	Glu	Phe	Ile	Gly	Met	Lys	Ser	Arg	Thr															
225					230					235					240															
Trp	Ala	Ser	Val	His	Leu	His	Ser	Phe	Phe	Ala	Val	Gly	Thr	Leu	Leu															
				245					250					255																
Val	Ala	Leu	Thr	Gly	Tyr	Leu	Val	Arg	Thr	Trp	Trp	Leu	Tyr	Gln	Met															
			260					265					270																	
Ile	Leu	Ser	Thr	Val	Thr	Val	Pro	Phe	Ile	Leu	Cys	Cys	Trp	Val	Leu															
		275					280					285																		
Pro	Glu	Thr	Pro	Phe	Trp	Leu	Leu	Ser	Glu	Gly	Arg	Tyr	Glu	Glu	Ala															
	290					295					300																			
Gln	Lys	Ile	Val	Asp	Ile	Met	Ala	Lys	Trp	Asn	Arg	Ala	Ser	Ser	Cys															
305					310					315					320															
Lys	Leu	Ser	Glu	Leu	Leu	Ser	Leu	Asp	Leu	Gln	Gly	Pro	Val	Ser	Asn															
				325				330					335																	
Ser	Pro	Thr	Glu	Val	Gln	Lys	His	Asn	Leu	Ser	Tyr	Leu	Phe	Tyr	Asn															
			340				345					350																		
Trp	Ser	Ile	Thr	Lys	Arg	Thr	Leu	Thr	Val	Trp	Leu	Ile	Trp	Phe	Thr															
		355					360					365																		
Gly	Ser	Leu	Gly	Phe	Tyr	Ser	Phe	Ser	Leu	Asn	Ser	Val	Asn	Leu	Gly															
	370					375					380																			
Gly	Asn	Glu	Tyr	Leu	Asn	Leu	Phe	Leu	Leu	Gly	Val	Val	Glu	Ile	Pro															
385					390					395				400																
Ala	Tyr	Thr	Phe	Val	Cys	Ile	Ala	Thr	Asp	Lys	Val	Gly	Arg	Arg	Thr															
			405					410					415																	
Val	Leu	Ala	Tyr	Ser	Leu	Phe	Cys	Ser	Ala	Leu	Ala	Cys	Gly	Val	Val															
			420				425					430																		
Met	Val	Ile	Pro	Gln	Lys	His	Tyr	Ile	Leu	Gly	Val	Val	Thr	Ala	Met															
	435						440					445																		
Val	Gly	Lys	Phe	Ala	Ile	Gly	Ala	Ala	Phe	Gly	Leu	Ile	Tyr	Leu	Tyr															
	450					455					460																			
Thr	Ala	Gln	Leu	Tyr	Pro	Thr	Ile	Val	Arg	Ser	Leu	Ala	Val	Gly	Ser															

[illegible]

Met	Phe	Gly	Val	Leu	Leu	Gly	Ser	Val	Thr	Phe	Gly	Tyr	Phe	Ser	Asp
145					150					155					160
Arg	Leu	Gly	Arg	Arg	Val	Val	Leu	Trp	Ala	Thr	Ser	Ser	Ser	Met	Phe
				165					170					175	
Leu	Phe	Gly	Ile	Ala	Ala	Ala	Phe	Ala	Val	Asp	Tyr	Tyr	Thr	Phe	Met
			180					185					190		
Ala	Ala	Arg	Phe	Phe	Leu	Ala	Met	Val	Ala	Ser	Gly	Tyr	Leu	Val	Val
		195					200					205			
Gly	Phe	Val	Tyr	Val	Met	Glu	Phe	Ile	Gly	Met	Lys	Ser	Arg	Thr	Trp
	210				215					220					
Ala	Ser	Val	His	Leu	His	Ser	Phe	Phe	Ala	Val	Gly	Thr	Leu	Leu	Val
225				230						235					240
Ala	Leu	Thr	Gly	Tyr	Leu	Val	Arg	Thr	Trp	Trp	Leu	Tyr	Gln	Met	Ile
			245					250					255		
Leu	Ser	Thr	Val	Thr	Val	Pro	Phe	Ile	Leu	Cys	Cys	Trp	Val	Leu	Pro
			260					265					270		
Glu	Thr	Pro	Phe	Trp	Leu	Leu	Ser	Glu	Gly	Arg	Tyr	Glu	Glu	Ala	Gln
	275						280					285			
Lys	Ile	Val	Asp	Ile	Met	Ala	Lys	Trp	Asn	Arg	Ala	Ser	Ser	Cys	Lys
	290					295					300				
Leu	Ser	Glu	Leu	Leu	Ser	Leu	Asp	Leu	Gln	Gly	Pro	Val	Ser	Asn	Ser
305				310						315					320
Pro	Thr	Glu	Val	Gln	Lys	His	Asn	Leu	Ser	Tyr	Leu	Phe	Tyr	Asn	Trp
				325					330					335	
Ser	Ile	Thr	Lys	Arg	Thr	Leu	Thr	Val	Trp	Leu	Ile	Trp	Phe	Thr	Gly
			340					345					350		
Ser	Leu	Gly	Phe	Tyr	Ser	Phe	Ser	Leu	Asn	Ser	Val	Asn	Leu	Gly	Gly
	355						360					365			
Asn	Glu	Tyr	Leu	Asn	Leu	Phe	Leu	Leu	Gly	Val	Val	Glu	Ile	Pro	Ala
	370					375					380				
Tyr	Thr	Phe	Val	Cys	Ile	Ala	Met	Asp	Lys	Val	Gly	Arg	Arg	Thr	Val
385				390						395					400
Leu	Ala	Tyr	Ser	Leu	Phe	Cys	Ser	Ala	Leu	Ala	Cys	Gly	Val	Val	Met
				405					410					415	
Val	Ile	Pro	Gln	Lys	His	Tyr	Ile	Leu	Gly	Val	Val	Thr	Ala	Met	Val
			420					425					430		
Gly	Lys	Phe	Ala	Ile	Gly	Ala	Ala	Phe	Gly	Leu	Ile	Tyr	Leu	Tyr	Thr
	435						440					445			

Ala Glu Leu Tyr Pro Thr Ile Val
450 455

<210> 165

<211> 361

<212> PPT

<213> Homo sapiens

<400> 165

Met Leu Ile Gln Pro Leu Phe Met Phe Gly Val Leu Leu Gly Ser Val
1 5 10 15

Thr Phe Gly Tyr Phe Ser Asp Arg Leu Gly Arg Arg Val Val Leu Trp
20 25 30

Ala Thr Ser Ser Ser Met Phe Leu Phe Gly Ile Ala Ala Phe Ala
35 40 45

Val Asp Tyr Tyr Thr Phe Met Ala Ala Arg Phe Phe Leu Ala Met Val
50 55 60

Ala Ser Gly Tyr Leu Val Val Gly Phe Val Tyr Val Met Glu Phe Ile
65 70 75 80

Gly Met Lys Ser Arg Thr Trp Ala Ser Val His Leu His Ser Phe Phe
85 90 95

Ala Val Gly Thr Leu Leu Val Ala Leu Thr Gly Tyr Leu Val Arg Thr
100 105 110

Trp Trp Leu Tyr Gln Met Ile Leu Ser Thr Val Thr Val Pro Phe Ile
115 120 125

Leu Cys Cys Trp Val Leu Pro Glu Thr Pro Phe Trp Leu Leu Ser Glu
130 135 140

Gly Arg Tyr Glu Glu Ala Gln Lys Ile Val Asp Ile Met Ala Lys Trp
145 150 155 160

Asn Arg Ala Ser Ser Cys Lys Leu Ser Glu Leu Leu Ser Leu Asp Leu
165 170 175

Gln Gly Pro Val Ser Asn Ser Pro Thr Glu Val Gln Lys His Asn Leu
180 185 190

Ser Tyr Leu Phe Tyr Asn Trp Ser Ile Thr Lys Arg Thr Leu Thr Val
195 200 205

Trp Leu Ile Trp Phe Thr Gly Ser Leu Gly Phe Tyr Ser Phe Ser Leu
210 215 220

Asn Ser Val Asn Leu Gly Asn Glu Tyr Leu Asn Leu Phe Leu Leu
225 230 235 240

Gly Val Val Glu Ile Pro Ala Tyr Thr Phe Val Cys Ile Ala Thr Asp
245 250 255

Lys Val Gly Arg Arg Thr Val Leu Ala Tyr Ser Leu Phe Cys Ser Ala
260 265 270

Leu Ala Cys Gly Val Val Met Val Ile Pro Gln Lys His Tyr Ile Leu
275 280 285

Gly Val Val Thr Ala Met Val Glv Lys Phe Ala Ile Glv Ala Ala Phe
290 295 300

Gly Leu Ile Tyr Leu Tyr Thr Ala Glu Leu Tyr Pro Thr Ile Val Arg
305 310 315 320

Ser Leu Ala Val Gly Ser Gly Ser Met Val Cys Arg Leu Ala Ser Ile
325 330 335

Leu Ala Pro Phe Ser Val Asp Leu Ser Ser Ile Trp Ile Phe Ile Pro
340 345 350

Gln Leu Leu Gly Gln His Leu Gln Glu
355 360

<210> 166

<211> 305

<212> PRT

<213> Homo sapiens

<400> 166

Ile Leu Ser Thr Val Thr Val Pro Phe Ile Leu Cys Cys Trp Val Leu
1 5 10 15

Pro Glu Thr Pro Phe Trp Leu Leu Ser Glu Gly Arg Tyr Glu Glu Ala
20 25 30

Gln Lys Ile Val Asp Ile Met Ala Lys Trp Asn Arg Ala Ser Ser Cys
35 40 45

Lys Leu Ser Glu Leu Leu Ser Leu Asp Leu Gln Gly Pro Val Ser Asn
50 55 60

Ser Pro Thr Glu Val Gln Lys His Asn Leu Ser Tyr Leu Phe Tyr Asn
65 70 75 80

Trp Ser Ile Thr Lys Arg Thr Leu Thr Val Trp Leu Ile Trp Phe Thr
85 90 95

Gly Ser Leu Gly Phe Tyr Ser Phe Ser Leu Asn Ser Val Asn Leu Gly
100 105 110

Gly Asn Glu Tyr Leu Asn Leu Phe Leu Leu Gly Val Val Glu Ile Pro
115 120 125

Ala Tyr Thr Phe Val Cys Ile Ala Met Asp Lys Val Gly Arg Arg Thr
130 135 140

Val Leu Ala Tyr Ser Leu Phe Cys Ser Ala Leu Ala Cys Gly Val Val

Ser Leu Asp Val Thr Arg Ser His Asn Lys Ser Pro His Ser Ile Arg
 100 105 110
 Lys His Arg Leu Ala Asp Leu Phe His Asn Leu Asp Val Ala Lys Met
 115 120 125
 Thr Leu Ile Val Trp Leu Asp Trp Phe Thr Ala Asn Leu Gly Tyr Tyr
 130 135 140
 Met Phe Gly Lys Glu Val Ile Arg Arg Lys Glu Asn Glu Pro Leu Tyr
 145 150 155 160
 Leu Leu Leu Val Gly Ala Met Glu Ile Pro Ala Tyr Ile Cys Leu Cys
 165 170 175
 Ile Trp Leu Lys Arg Val Gly Arg Arg Lys Thr Met Leu Leu Phe Leu
 180 185 190
 Leu Val Ser Ser Leu Thr Cys Met Leu His Val Val Met Pro Ser Asp
 195 200 205
 Tyr Lys Thr Ala Lys Arg Met Val Ala Leu Leu Val Lys Ser Val Ile
 210 215 220
 Ser Ser Val Phe Ala Phe Ile Tyr Leu Tyr Thr Ala Glu Leu Tyr Pro
 225 230 235 240
 Thr Thr Val Arg Cys Leu Ala Val Gly Ser Ser Asn Met Val Ser His
 245 250 255
 Val Ser Ser Ile Phe Ile Pro Phe Thr Ser His Phe Ser Lys Val Trp
 260 265 270
 Ile Phe Leu Pro Gln Ile Leu Phe Gly Ile Leu Ala Ile Leu Ser Gly
 275 280 285
 Leu Leu Ser Leu Lys Leu Pro Glu Thr Gln Asp Thr Pro Met Lys Ser
 290 295 300
 Thr Trp Glu Thr Thr Glu Gln Gln Val Pro Glu Asn Lys Asp Ser Leu
 305 310 315 320
 Gly Glu Gly Pro Pro Asp Ser Phe Glu Arg Trp Asp Ser Ser Arg Ala
 325 330 335
 Leu Ser Phe Ala Glu Arg Trp Gly Leu Ser Arg Ala Ser Pro Asp Ala
 340 345 350
 Glu Lys Trp Gly Ser Gly Arg Val Pro Pro Asp Ala Gly Lys Trp Gly
 355 360 365
 Ala Gly Ile Ala Pro Pro Val Thr Glu Arg Gly Ala Ser Gly Arg Ala
 370 375 380
 Ser Leu Glu Asp Glu Ser Gly Gly Ser Gly Arg Ala Pro Pro Glu Lys
 385 390 395 400

Asn Thr Glu Met Glu Asn Glu Ile Glu Asn Met Lys Val Ser Asn Leu
 405 410 415

Gly Gly Phe

<210> 168

<211> 267

<212> PRT

<213> Homo sapiens

<400> 168

Gln Tyr Glu Phe Met Gln Arg Ala Leu Leu Ala Ser Ile Leu Val Gly
 1 5 10 15
 Leu Ala Cys Gly Ile Leu Gly Ser Phe Leu Val Leu Arg Arg Gln Ser
 20 25 30
 Leu Met Gly Asp Ala Ile Ser His Ala Val Leu Pro Gly Val Ala Leu
 35 40 45
 Ala Phe Phe Leu Gly Ile Asn Lys Ser Leu Glu Ile Pro Leu Ile Gly
 50 55 60
 Ala Phe Leu Phe Gly Leu Ile Ala Ala Val Ala Ile Gly Tyr Leu Lys
 65 70 75 80
 Arg Asn Ser Arg Leu Lys Glu Asp Thr Ala Ile Gly Ile Val Phe Ser
 85 90 95
 Ser Phe Leu Ala Leu Gly Leu Leu Leu Ile Ser Leu Ile Lys Gly Ser
 100 105 110
 Asn Ala Ala Ser Lys Val Asp Leu Asp His Tyr Leu Phe Gly Asn Ile
 115 120 125
 Leu Gly Ile Ser Gln Gln Asp Leu Ile Gln Ile Ala Ile Ile Thr Ala
 130 135 140
 Ile Ile Leu Leu Leu Leu Leu Leu Phe Trp Lys Glu Leu Leu Leu Ile
 145 150 155 160
 Thr Phe Asp Pro Asp Leu Ala Lys Val Ile Gly Leu Pro Val Asn Phe
 165 170 175
 Leu Lys Leu Leu Leu Leu Ile Leu Leu Ala Leu Thr Ile Val Val Ala
 180 185 190
 Leu Gln Ala Val Gly Val Ile Leu Val Ile Ala Leu Leu Ile Thr Pro
 195 200 205
 Ala Ala Thr Ala Arg Leu Leu Thr Lys Ser Leu Glu Ser Met Leu Leu
 210 215 220
 Ile Ala Ser Ala Ile Gly Val Val Ser Ser Val Ala Gly Leu Leu Leu
 225 230 235 240

Ser Tyr Tyr Phe Asp Thr Ala Thr Gly Pro Val Ile Val Leu Ile Ala
245 250 255

Thr Leu Leu Phe Leu Ile Ser Phe Leu Phe Ala
260 265

<210> 169

<211> 119

<212> PRT

<213> Homo sapiens

<400> 169

Leu Leu Ile Leu Leu Leu Val Leu Leu Ala Pro Leu Ala Glu Glu Leu
1 5 10 15

Phe Phe Arg Gly Ile Leu Leu Thr Ala Leu Glu Arg Arg Leu Lys Lys
20 25 30

Arg Tyr Thr Leu Phe Gly Pro Leu Leu Ala Ile Ile Ile Ser Ser Leu
35 40 45

Ile Phe Ala Leu Leu His Leu Ala Asn Ala Leu Glu Leu Leu Gln Leu
50 55 60

Leu Gly Asn Val Leu Ile Gln Pro Val Leu Ile Asn Trp Leu Gln Leu
65 70 75 80

Leu Tyr Thr Phe Leu Leu Gly Leu Val Leu Gly Leu Leu Tyr Leu Arg
85 90 95

Arg Thr Gly Ser Leu Leu Ala Pro Ile Leu Val His Ala Leu Asn Asn
100 105 110

Leu Ile Gly Phe Ile Leu Leu
115

<210> 170

<211> 488

<212> PRT

<213> Homo sapiens

<400> 170

Val Ala Leu Val Ala Ala Leu Gly Gly Gly Phe Leu Phe Gly Tyr Asp
1 5 10 15

Thr Gly Val Ile Gly Gly Phe Leu Ala Leu Ile Asp Phe Leu Phe Arg
20 25 30

Phe Gly Leu Leu Thr Ser Ser Gly Ala Leu Ala Glu Leu Val Gly Tyr
35 40 45

Ser Thr Val Leu Thr Gly Leu Val Val Ser Ile Phe Phe Leu Gly Arg
50 55 60

Leu Ile Gly Ser Leu Phe Ala Gly Lys Leu Gly Asp Arg Phe Gly Arg
 65 70 75 80
 Lys Lys Ser Leu Leu Ile Ala Leu Val Leu Phe Val Ile Gly Ala Leu
 85 90 95
 Leu Ser Gly Ala Ala Pro Gly Tyr Thr Thr Ile Gly Leu Trp Ala Phe
 100 105 110
 Tyr Leu Leu Ile Val Gly Arg Val Leu Val Gly Leu Gly Val Gly Gly
 115 120 125
 Ala Ser Val Leu Val Pro Met Tyr Ile Ser Glu Ile Ala Pro Lys Ala
 130 135 140
 Leu Arg Gly Ala Leu Gly Ser Leu Tyr Gln Leu Ala Ile Thr Ile Gly
 145 150 155 160
 Ile Leu Val Ala Ala Ile Ile Gly Leu Gly Leu Asn Lys Thr Asn Asn
 165 170 175
 Asp Ser Ala Leu Asn Ser Trp Gly Trp Arg Ile Pro Leu Gly Leu Gln
 180 185 190
 Leu Val Pro Ala Leu Leu Leu Leu Ile Gly Leu Leu Phe Leu Pro Glu
 195 200 205
 Ser Pro Arg Trp Leu Val Glu Lys Gly Lys Leu Glu Glu Ala Arg Glu
 210 215 220
 Val Leu Ala Lys Leu Arg Gly Val Glu Asp Val Asp Gln Glu Ile Gln
 225 230 235 240
 Glu Ile Lys Ala Glu Leu Glu Ala Thr Val Ser Glu Glu Lys Ala Gly
 245 250 255
 Lys Ala Ser Trp Gly Glu Leu Phe Arg Gly Arg Thr Arg Pro Lys Val
 260 265 270
 Arg Gln Arg Leu Leu Met Gly Val Met Leu Gln Ala Phe Gln Gln Leu
 275 280 285
 Thr Gly Ile Asn Ala Ile Phe Tyr Tyr Ser Pro Thr Ile Phe Lys Ser
 290 295 300
 Val Gly Val Ser Asp Ser Val Ala Ser Leu Leu Val Thr Ile Ile Val
 305 310 315 320
 Gly Val Val Asn Phe Val Phe Thr Phe Val Ala Leu Ile Phe Leu Val
 325 330 335
 Asp Arg Phe Gly Arg Arg Pro Leu Leu Leu Leu Gly Ala Ala Gly Met
 340 345 350
 Ala Ile Cys Phe Leu Ile Leu Gly Ala Ser Ile Gly Val Ala Leu Leu
 355 360 365

Leu Leu Asn Lys Pro Lys Asp Pro Ser Ser Lys Ala Ala Gly Ile Val
370 375 380

Ala Ile Val Phe Ile Leu Leu Phe Ile Ala Phe Phe Ala Leu Gly Trp
385 390 395 400

Gly Pro Ile Pro Trp Val Ile Leu Ser Glu Leu Phe Pro Thr Lys Val
405 410 415

Arg Ser Lys Ala Leu Ala Leu Ala Thr Ala Ala Asn Trp Leu Ala Asn
420 425 430

Phe Ile Ile Gly Phe Leu Phe Pro Tyr Ile Thr Gly Ala Ile Gly Leu
435 440 445

Ala Leu Gly Gly Tyr Val Phe Leu Val Phe Ala Gly Leu Leu Val Leu
450 455 460

Phe Ile Leu Phe Val Phe Phe Phe Val Pro Glu Thr Lys Gly Arg Thr
465 470 475 480

Leu Glu Glu Ile Glu Glu Leu Phe
485

<210> 171

<211> 343

<212> PRT

<213> Homo sapiens

<400> 171

Met Leu Ala Thr Arg Leu Ser Arg Pro Leu Ser Arg Leu Pro Gly Lys
1 5 10 15

Thr Leu Ser Ala Cys Asp Arg Glu Asn Gly Ala Arg Arg Pro Leu Leu
20 25 30

Leu Gly Ser Thr Ser Phe Ile Pro Ile Gly Arg Arg Thr Tyr Ala Ser
35 40 45

Ala Ala Glu Pro Val Gly Ser Lys Ala Val Leu Val Thr Gly Cys Asp
50 55 60

Ser Gly Phe Gly Phe Ser Leu Ala Lys His Leu His Ser Lys Gly Phe
65 70 75 80

Leu Val Phe Ala Gly Cys Leu Met Lys Asp Lys Gly His Asp Gly Val
85 90 95

Lys Glu Leu Asp Ser Leu Asn Ser Asp Arg Leu Arg Thr Val Gln Leu
100 105 110

Asn Val Cys Ser Ser Glu Glu Val Glu Lys Val Val Glu Ile Val Arg
115 120 125

Ser Ser Leu Lys Asp Pro Glu Lys Gly Met Trp Gly Leu Val Asn Asn
130 135 140

Ala Gly Ile Ser Thr Phe Gly Glu Val Glu Phe Thr Ser Leu Glu Thr
145 150 155 160

Tyr Lys Gln Val Ala Glu Val Asn Leu Trp Gly Thr Val Arg Met Thr
165 170 175

Lys Ser Phe Leu Pro Leu Ile Arg Arg Ala Lys Gly Arg Val Val Asn
180 185 190

Ile Ser Ser Met Leu Gly Arg Met Ala Asn Pro Ala Arg Ser Pro Tyr
195 200 205

Cys Ile Thr Lys Phe Gly Val Glu Ala Phe Ser Asp Cys Leu Arg Tyr
210 215 220

Glu Met Tyr Pro Leu Gly Val Lys Val Ser Val Val Glu Pro Gly Asn
225 230 235 240

Phe Ile Ala Ala Thr Ser Leu Tyr Ser Pro Glu Ser Ile Gln Ala Ile
245 250 255

Ala Lys Lys Met Trp Glu Glu Leu Pro Glu Val Val Arg Lys Asp Tyr
260 265 270

Gly Lys Lys Tyr Phe Asp Glu Lys Ile Ala Lys Met Glu Thr Tyr Cys
275 280 285

Ser Ser Gly Ser Thr Asp Thr Ser Pro Val Ile Asp Ala Val Thr His
290 295 300

Ala Leu Thr Ala Thr Thr Pro Tyr Thr Arg Tyr His Pro Met Asp Tyr
305 310 315 320

Tyr Trp Trp Leu Arg Met Gln Ile Met Thr His Leu Pro Gly Ala Ile
325 330 335

Ser Asp Met Ile Tyr Ile Arg
340

<210> 172

<211> 343

<212> PRT

<213> Homo sapiens

<400> 172

Met Leu Ala Thr Arg Leu Ser Arg Pro Leu Ser Arg Leu Pro Gly Lys
1 5 10 15

Thr Leu Ser Ala Cys Asp Arg Glu Asn Gly Ala Arg Arg Pro Leu Leu
20 25 30

Leu Gly Ser Thr Ser Phe Ile Pro Ile Gly Arg Arg Thr Tyr Ala Ser
35 40 45

Ala Ala Glu Pro Val Gly Ser Lys Ala Val Leu Val Thr Gly Cys Asp

<210> 173
 <211> 344
 <212> PRT
 <213> Homo sapiens

<400> 173

Met Leu Ala Thr Arg Thr Leu Ser Arg Pro Leu Ser Arg Leu Pro Gly
 1 5 10 15
 Lys Thr Leu Ser Ala Cys Asn Arg Glu Asn Gly Ala Arg Arg Pro Leu
 20 25 30
 Leu Leu Gly Ser Thr Ser Phe Ile Pro Ile Gly Arg Arg Thr Tyr Ala
 35 40 45
 Ser Ala Ala Glu Pro Val Gly Ser Lys Ala Val Leu Val Thr Gly Cys
 50 55 60
 Asp Ser Gly Phe Gly Phe Ser Leu Ala Lys His Leu His Ser Lys Gly
 65 70 75 80
 Phe Leu Val Phe Ala Gly Cys Leu Met Lys Asp Lys Gly His Asp Gly
 85 90 95
 Val Lys Glu Leu Asp Ser Leu Asn Ser Asp Arg Leu Arg Thr Val Gln
 100 105 110
 Leu Asn Val Phe Arg Ser Glu Glu Val Glu Lys Val Val Gly Asp Cys
 115 120 125
 Pro Phe Glu Pro Glu Gly Pro Glu Lys Gly Met Trp Gly Leu Val Asn
 130 135 140
 Asn Ala Gly Ile Ser Thr Phe Gly Glu Val Glu Phe Thr Ser Leu Glu
 145 150 155 160
 Thr Tyr Lys Gln Val Ala Glu Val Asn Leu Trp Gly Thr Val Arg Met
 165 170 175
 Thr Lys Ser Phe Leu Pro Leu Ile Arg Arg Ala Lys Gly Arg Val Val
 180 185 190
 Asn Ile Ser Ser Met Leu Gly Arg Met Ala Asn Pro Ala Arg Ser Pro
 195 200 205
 Tyr Cys Ile Thr Lys Phe Gly Val Glu Ala Phe Ser Asp Cys Leu Arg
 210 215 220
 Tyr Glu Met Tyr Pro Leu Gly Val Lys Val Ser Val Val Glu Pro Gly
 225 230 235 240
 Asn Phe Ile Ala Ala Thr Ser Leu Tyr Asn Pro Glu Ser Ile Gln Ala
 245 250 255
 Ile Ala Lys Lys Met Trp Glu Glu Leu Pro Glu Val Val Arg Lys Asp
 260 265 270

Tyr Gly Lys Lys Tyr Phe Asp Glu Lys Ile Ala Lys Met Glu Thr Tyr
 275 280 285

Cys Ser Ser Gly Ser Thr Asp Thr Ser Pro Val Ile Asp Ala Val Thr
 290 295 300

His Ala Leu Thr Ala Thr Thr Pro Tyr Thr Arg Tyr His Pro Met Asp
 305 310 315 320

Tyr Tyr Trp Trp Leu Arg Met Gln Ile Met Thr His Leu Pro Gly Ala
 325 330 335

Ile Ser Asp Met Ile Tyr Ile Arg
 340

<210> 174

<211> 343

<212> PRT

<213> Homo sapiens

<400> 174

Gly Leu Arg Pro Pro Pro Pro Gly Arg Phe Ser Arg Leu Pro Gly Lys
 1 5 10 15

Thr Leu Ser Ala Cys Asp Arg Glu Asn Gly Ala Arg Arg Pro Leu Leu
 20 25 30

Leu Gly Ser Thr Ser Phe Ile Pro Ile Gly Arg Arg Thr Tyr Ala Ser
 35 40 45

Ala Ala Glu Pro Val Gly Ser Lys Ala Val Leu Val Thr Gly Cys Asp
 50 55 60

Ser Gly Phe Gly Phe Ser Leu Ala Lys His Leu His Ser Lys Gly Phe
 65 70 75 80

Leu Val Phe Ala Gly Cys Leu Met Lys Asp Lys Gly His Asp Gly Val
 85 90 95

Lys Glu Leu Asp Ser Leu Asn Ser Asp Arg Leu Arg Thr Val Gln Leu
 100 105 110

Asn Val Phe Arg Ser Glu Glu Val Glu Lys Val Val Gly Asp Cys Pro
 115 120 125

Phe Glu Pro Glu Gly Pro Glu Lys Gly Met Trp Gly Leu Val Asn Asn
 130 135 140

Ala Gly Ile Ser Thr Phe Gly Glu Val Glu Phe Thr Ser Leu Glu Thr
 145 150 155 160

Tyr Lys Gln Val Ala Glu Val Asn Leu Trp Gly Thr Val Arg Met Thr
 165 170 175

Lys Ser Phe Leu Pro Leu Ile Arg Arg Ala Lys Gly Arg Val Val Asn
 180 185 190

Ile Ser Ser Met Leu Gly Arg Met Ala Asn Pro Ala Arg Ser Pro Tyr
 195 200 205
 Cys Ile Thr Lys Phe Gly Val Glu Ala Phe Ser Asp Cys Leu Arg Tyr
 210 215 220
 Glu Met Tyr Pro Leu Gly Val Lys Val Ser Val Val Glu Pro Gly Asn
 225 230 235 240
 Phe Ile Ala Ala Thr Ser Leu Tyr Asn Pro Glu Ser Ile Gln Ala Ile
 245 250 255
 Ala Lys Lys Met Trp Glu Glu Leu Pro Glu Val Val Arg Lys Asp Tyr
 260 265 270
 Gly Lys Lys Tyr Phe Asp Glu Lys Ile Ala Lys Met Glu Thr Tyr Cys
 275 280 285
 Ser Ser Gly Ser Thr Asp Thr Ser Pro Val Ile Asp Ala Val Thr His
 290 295 300
 Ala Leu Thr Ala Thr Thr Pro Tyr Thr Arg Tyr His Pro Met Asp Tyr
 305 310 315 320
 Tyr Trp Trp Leu Arg Met Gln Ile Met Thr His Leu Pro Gly Ala Ile
 325 330 335
 Ser Asp Met Ile Tyr Ile Arg
 340

<210> 175
 <211> 344
 <212> PRT
 <213> Rattus norvegicus

<400> 175
 Met Met Leu Ala Ala Arg Leu Ser Arg Pro Leu Ser Gln Leu Pro Gly
 1 5 10 15
 Lys Ala Leu Ser Val Cys Asp Arg Glu Asn Gly Thr Arg His Thr Leu
 20 25 30
 Leu Phe Tyr Pro Ala Ser Phe Ser Pro Asp Thr Arg Arg Thr Tyr Thr
 35 40 45
 Ser Gln Ala Asp Ala Ala Ser Gly Lys Ala Val Leu Val Thr Gly Cys
 50 55 60
 Asp Ser Gly Phe Gly Phe Ser Leu Ala Lys His Leu His Ser Lys Gly
 65 70 75 80
 Phe Leu Val Phe Ala Gly Cys Leu Leu Lys Glu Gln Gly Asp Ala Gly
 85 90 95
 Val Arg Gln Leu Asp Ser Leu Lys Ser Asp Arg Leu Arg Thr Ile Gln

100					105					110					
Leu	Asn	Val	Cys	Asn	Ser	Glu	Glu	Val	Glu	Lys	Ala	Val	Glu	Thr	Val
	115						120					125			
Arg	Ser	Gly	Leu	Lys	Asp	Pro	Glu	Lys	Gly	Met	Trp	Gly	Leu	Val	Asn
	130					135					140				
Asn	Ala	Gly	Ile	Ser	Thr	Phe	Gly	Glu	Val	Glu	Phe	Thr	Ser	Met	Glu
	145					150					155				160
Thr	Tyr	Lys	Glu	Val	Ala	Glu	Val	Asn	Leu	Trp	Gly	Thr	Val	Arg	Thr
				165					170					175	
Thr	Lys	Ser	Phe	Leu	Pro	Leu	Leu	Arg	Arg	Ala	Lys	Gly	Arg	Val	Val
			180					185					190		
Asn	Ile	Ser	Ser	Met	Leu	Gly	Arg	Met	Ala	Asn	Pro	Ala	Arg	Ser	Pro
	195						200					205			
Tyr	Cys	Ile	Thr	Lys	Phe	Gly	Val	Glu	Ala	Phe	Ser	Asp	Cys	Leu	Arg
	210					215					220				
Tyr	Glu	Met	His	Pro	Leu	Gly	Val	Lys	Val	Ser	Val	Val	Glu	Pro	Gly
	225					230					235			240	
Asn	Phe	Ile	Ala	Ala	Ihr	Ser	Leu	Tyr	Ser	Pro	Glu	Arg	Ile	Gln	Ala
			245						250				255		
Ile	Ala	Lys	Lys	Met	Trp	Asp	Glu	Leu	Pro	Glu	Val	Val	Arg	Lys	Asp
			260				265						270		
Tyr	Gly	Lys	Lys	Tyr	Phe	Asp	Glu	Lys	Ile	Ala	Lys	Met	Glu	Thr	Tyr
		275					280					285			
Cys	Asn	Ser	Gly	Ser	Thr	Asp	Thr	Ser	Ser	Val	Ile	Asn	Ala	Val	Thr
	290					295					300				
His	Ala	Leu	Thr	Ala	Ala	Thr	Pro	Tyr	Thr	Arg	Tyr	His	Pro	Met	Asp
	305					310					315			320	
Tyr	Tyr	Trp	Trp	Leu	Arg	Met	Gln	Val	Met	Thr	His	Phe	Pro	Gly	Ala
			325						330					335	
Ile	Ser	Asp	Lys	Ile	Tyr	Ile	His								
			340												

<210> 176

<211> 271

<212> PRT

<213> Homo sapiens

<400> 176

Thr	Gly	Lys	Val	Ala	Leu	Val	Thr	Gly	Ala	Ser	Ser	Gly	Ile	Gly	Leu
1					5				10					15	

Ala Ile Ala Lys Arg Leu Ala Lys Glu Gly Ala Lys Val Val Val Val
 20 25 30
 Asp Arg Arg Glu Glu Lys Ala Glu Gln Val Ala Ala Glu Lys Ala
 35 40 45
 Glu Leu Gly Asp Arg Ala Leu Phe Ile Gln Leu Asp Val Thr Asp Glu
 50 55 60
 Glu Gln Val Lys Ala Ala Val Ala Gln Ala Val Glu Arg Leu Gly Asn
 65 70 75 80
 Arg Leu Asp Val Leu Val Asn Asn Ala Gly Ile Leu Gly Pro Gly Pro
 85 90 95
 Pro Phe Glu Glu Leu Ser Glu Glu Asp Trp Glu Arg Val Ile Asp Val
 100 105 110
 Asn Leu Thr Gly Val Phe Leu Leu Thr Gln Ala Val Leu Pro Ala Met
 115 120 125
 Asp His Met Leu Lys Arg Lys Gly Gly Arg Ile Val Asn Ile Ser Ser
 130 135 140
 Val Ala Gly Leu Asn Val Gly Val Pro Gly Leu Ser Ala Tyr Ser Ala
 145 150 155 160
 Ser Lys Ala Ala Val Ile Gly Leu Thr Arg Ser Leu Ala Leu Glu Leu
 165 170 175
 Ala Pro His Gly Thr Gly Ile Arg Val Asn Ala Val Ala Pro Gly Gly
 180 185 190
 Val Asp Thr Asp Met Thr Lys Ala Leu Arg Ser Arg Leu Ile Glu Ala
 195 200 205
 Lys Lys Lys Val Arg Glu Val Ala Asp Ile Ala Asp Pro Glu Leu Glu
 210 215 220
 Glu Arg Ile Thr Ser Thr Ile Thr Pro Leu Gly Arg Tyr Gly Val Thr
 225 230 235 240
 Pro Glu Glu Ile Ala Asn Ala Val Leu Phe Leu Ala Ser Asp Gly Ala
 245 250 255
 Ser Tyr Ser Val Thr Gly Gln Thr Leu Asn Val Asp Gly Gly Leu
 260 265 270

<210> 177

<211> 256

<212> PRT

<213> Homo sapiens

<400> 177

Tyr Asp Val Trp Met Gly Asn Ser Arg Gly Asn Thr Trp Ser Arg Arg
 1 5 10 15

His Lys Thr Leu Ser Glu Thr Asp Glu Lys Phe Trp Ala Phe Gly Phe
 20 25 30
 Asp Glu Met Ala Lys Tyr Asp Leu Pro Gly Val Ile Asp Phe Ile Val
 35 40 45
 Asn Lys Thr Glv Gln Glu Lys Leu Trp Phe Ile Glv His Ser Leu Glv
 50 55 60
 Thr Thr Ile Gly Phe Val Ala Phe Ser Thr Met Pro Glu Leu Ala Gln
 65 70 75 80
 Arg Ile Lys Met Asn Phe Ala Leu Gly Pro Thr Ile Ser Phe Lys Tyr
 85 90 95
 Pro Thr Gly Ile Phe Thr Arg Phe Phe Leu Leu Pro Asn Ser Ile Ile
 100 105 110
 Lys Ala Val Phe Gly Thr Lys Gly Phe Phe Leu Glu Asp Lys Lys Thr
 115 120 125
 Lys Ile Ala Ser Thr Lys Ile Cys Asn Asn Lys Ile Leu Trp Leu Ile
 130 135 140
 Cys Ser Glu Phe Met Ser Leu Trp Ala Gly Ser Asn Lys Lys Asn Met
 145 150 155 160
 Asn Gln Leu Tyr His Ser Asp Glu Phe Arg Ala Tyr Asp Trp Gly Asn
 165 170 175
 Asp Ala Asp Asn Met Lys His Tyr Asn Gln Ser His Pro Pro Ile Tyr
 180 185 190
 Asp Leu Thr Ala Met Lys Val Pro Thr Ala Ile Trp Ala Gly Gly His
 195 200 205
 Asp Val Leu Val Thr Pro Gln Asp Val Ala Arg Ile Leu Pro Gln Ile
 210 215 220
 Lys Ser Leu His Tyr Phe Lys Leu Leu Pro Asp Trp Asn His Phe Asp
 225 230 235 240
 Phe Val Trp Gly Leu Asp Ala Pro Gln Arg Met Tyr Ser Glu Ile Ile
 245 250 255

<210> 179

<211> 95

<212> PRT

<213> Homo sapiens

<400> 178

Tyr Gln Thr Leu Val Pro Gln Asn Glu Ala Ala Gly Thr Ala Val Leu

1	5	10	15
Arg Val Val	Ala Gln Asp	Pro Asp Ala Gly Glu	Ala Gly Arg Leu Val
	20	25	30
Tyr Ser Leu	Ala Ala Leu Met	Asn Ser Arg Ser Leu	Glu Leu Phe Ser
	35	40	45
Ile Asp Pro	Gln Ser Gly Leu	Ile Arg Thr Ala	Ala Ala Leu Asp Arg
	50	55	60
Glu Ser Met	Glu Arg His Tyr	Leu Arg Val Thr	Ala Gln Asp His Gly
	65	70	75
Ser Pro Arg	Leu Ser Ala Thr	Thr Met Val Ala	Val Thr Val Ala
	85	90	95

<210> 179
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 179
Tyr Arg Glu Thr Leu Arg Glu Asn Val Glu Glu Gly Tyr Pro Ile Leu
1 5 10 15
Gln Leu Arg Ala Thr Asp Gly Asp Ala Pro Pro Asn Ala Asn Leu Arg
20 25 30
Tyr Arg Phe Val Gly Pro Pro Ala Ala Arg Ala Ala Ala Ala Ala
35 40 45
Phe Glu Ile Asp Pro Arg Ser Gly Leu Ile Ser Thr Ser Gly Arg Val
50 55 60
Asp Arg Glu His Met Glu Ser Tyr Glu Leu Val Val Glu Ala Ser Asp
65 70 75 80
Gln Gly Gln Glu Pro Gly Pro Arg Ser Ala Thr Val Arg Val His Ile
85 90 95
Thr Val Leu

<210> 180
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 180
Tyr Val Ala Gln Val Arg Glu Asp Val Arg Pro His Thr Val Val Leu
1 5 10 15
Arg Val Thr Ala Thr Asp Arg Asp Lys Asp Ala Asn Gly Leu Val His
20 25 30

Tyr Asn Ile Ile Ser Gly Asn Ser Arg Gly His Phe Ala Ile Asp Ser
 35 40 45

Leu Thr Gly Glu Ile Gln Val Val Ala Pro Leu Asp Phe Glu Ala Glu
 50 55 60

Arg Glu Tyr Ala Leu Arg Ile Arg Ala Gln Asp Ala Gly Arg Pro Pro
 65 70 75 80

Leu Ser Asn Asn Thr Gly Leu Ala Ser Ile Gln Val Val
 85 90

<210> 181

<211> 92

<212> PRT

<213> Homo sapiens

<400> 181

Phe Gln Val Ser Val Leu Glu Asn Ala Pro Leu Gly His Ser Val Ile
 1 5 10 15

His Ile Gln Ala Val Asp Ala Asp His Gly Glu Asn Ala Arg Leu Glu
 20 25 30

Tyr Ser Leu Thr Gly Val Ala Pro Asp Thr Pro Phe Val Ile Asn Ser
 35 40 45

Ala Thr Gly Trp Val Ser Val Ser Gly Pro Leu Asp Arg Glu Ser Val
 50 55 60

Glu His Tyr Phe Phe Gly Val Glu Ala Arg Asp His Gly Ser Pro Pro
 65 70 75 80

Leu Ser Ala Ser Ala Ser Val Thr Val Thr Val Leu
 85 90

<210> 182

<211> 45

<212> PRT

<213> Homo sapiens

<400> 182

Cys Ala Pro Asn Asn Pro Cys Ser Asn Gly Gly Thr Cys Val Asn Thr
 1 5 10 15

Pro Gly Gly Ser Ser Asp Asn Phe Gly Gly Tyr Thr Cys Glu Cys Pro
 20 25 30

Pro Gly Asp Tyr Tyr Leu Ser Tyr Thr Gly Lys Arg Cys
 35 40 45

<210> 183

<211> 45

<212> PRT

<213> Homo sapiens

<400> 183

Cys Ala Pro Asn Asn Pro Cys Ser Asn Gly Gly Thr Cys Val Asn Thr
1 5 10 15

Pro Gly Gly Ser Ser Asp Asn Phe Gly Gly Tyr Thr Cys Glu Cys Pro
20 25 30

Pro Gly Asp Tyr Tyr Leu Ser Tyr Thr Gly Lys Arg Cys
35 40 45

<210> 184

<211> 45

<212> PRT

<213> Homo sapiens

<400> 184

Cys Ala Pro Asn Asn Pro Cys Ser Asn Gly Gly Thr Cys Val Asn Thr
1 5 10 15

Pro Gly Gly Ser Ser Asp Asn Phe Gly Gly Tyr Thr Cys Glu Cys Pro
20 25 30

Pro Gly Asp Tyr Tyr Leu Ser Tyr Thr Gly Lys Arg Cys
35 40 45

<210> 185

<211> 67

<212> PRT

<213> Homo sapiens

<400> 185

Cys Pro Ala Asn Glu Gln Tyr Thr Glu Cys Gly Pro Ser Cys Glu Pro
1 5 10 15

Ser Cys Ser Asn Pro Asp Gly Pro Leu Glu Thr Thr Pro Pro Cys Glu
20 25 30

Gly Thr Ser Pro Lys Val Pro Ser Thr Cys Lys Glu Gly Cys Val Cys
35 40 45

Gln Pro Gly Tyr Val Arg Asn Asn Asp Gly Asp Lys Cys Val Pro Arg
50 55 60

Ser Glu Cys
65

<210> 186

<211> 45

<212> PRT

<213> Homo sapiens

<400> 186

Cys Ala Pro Asn Asn Pro Cys Ser Asn Gly Gly Thr Cys Val Asn Thr
1 5 10 15

Pro Gly Gly Ser Ser Asp Asn Phe Gly Gly Tyr Thr Cys Glu Cys Pro
20 25 30

Pro Gly Asp Tyr Tyr Leu Ser Tyr Thr Gly Lys Arg Cys
35 40 45

<210> 187

<211> 45

<212> PRT

<213> Homo sapiens

<400> 187

Cys Ala Pro Asn Asn Pro Cys Ser Asn Gly Gly Thr Cys Val Asn Thr
1 5 10 15

Pro Gly Gly Ser Ser Asp Asn Phe Gly Gly Tyr Thr Cys Glu Cys Pro
20 25 30

Pro Gly Asp Tyr Tyr Leu Ser Tyr Thr Gly Lys Arg Cys
35 40 45

<210> 188

<211> 45

<212> PRT

<213> Homo sapiens

<400> 188

Cys Ala Pro Asn Asn Pro Cys Ser Asn Gly Gly Thr Cys Val Asn Thr
1 5 10 15

Pro Gly Gly Ser Ser Asp Asn Phe Gly Gly Tyr Thr Cys Glu Cys Pro
20 25 30

Pro Gly Asp Tyr Tyr Leu Ser Tyr Thr Gly Lys Arg Cys
35 40 45

<210> 189

<211> 45

<212> PRT

<213> Homo sapiens

<400> 189

Cys Ala Pro Asn Asn Pro Cys Ser Asn Gly Gly Thr Cys Val Asn Thr
1 5 10 15

Pro Gly Gly Ser Ser Asp Asn Phe Gly Gly Tyr Thr Cys Glu Cys Pro
20 25 30

Pro Gly Asp Tyr Tyr Leu Ser Tyr Thr Gly Lys Arg Cys
35 40 45

<210> 190
 <211> 18
 <212> PRT
 <213> Homo sapiens

<400> 190
 Leu Pro Cys Glu Glu Val Thr Ser Ile Ile Glu Arg Asp Asn Ile Asp
 1 5 10 15

Phe Lys

<210> 191
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 191
 Phe Asp Arg Pro Arg Gly Val Ala Val Asp Pro Ser Asp Gly Gln Ile
 1 5 10 15

Val Val Ala Asp Gln Ser Glu Asn His Arg Ile Gln Val Phe
 20 25 30

<210> 192
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 192
 Phe Asp Arg Pro Arg Gly Val Ala Val Asp Pro Ser Asp Gly Gln Ile
 1 5 10 15

Val Val Ala Asp Gln Ser Glu Asn His Arg Ile Gln Val Phe
 20 25 30

<210> 193
 <211> 28
 <212> PRT
 <213> Homo sapiens

<400> 193
 Leu Lys Val Glu Phe Asp Glu Leu Glu Thr Gly Leu Leu Lys Ser Ile
 1 5 10 15

Thr Arg Lys Gln Asp Asn Lys Thr Val His Val Asn
 20 25

<210> 194
 <211> 29
 <212> PRT

<213> Homo sapiens

<400> 194

Tyr His Leu Arg Leu Asn Glu Asp Ala Ala Val Gly Thr Ser Val Val
1 5 10 15
Ser Val Thr Ala Val Asp Arg Asp Ala Asn Ser Ala Ile Ser Tyr Gln
20 25 30
Ile Thr Gly Gly Asn Thr Arg Asn Arg Phe Ala Ile Ser Thr Gln Gly
35 40 45
Gly Val Gly Leu Val Thr Leu Ala Leu Pro Leu Asp Tyr Lys Gln Glu
50 55 60
Arg Tyr Phe Lys Leu Val Leu Thr Ala Ser Asp Arg Ala Leu His Asp
65 70 75 80
His Cys Tyr Val His Ile Asn Ile Thr
85

<210> 195

<211> 90

<212> PRT

<213> Homo sapiens

<400> 195

Tyr Ser Val Ser Val Asn Glu Asp Arg Pro Met Gly Ser Thr Ile Val
1 5 10 15
Val Ile Ser Ala Ser Asp Asp Asp Val Gly Glu Asn Ala Arg Ile Thr
20 25 30
Tyr Leu Leu Glu Asp Asn Leu Pro Gln Phe Arg Ile Asp Ala Asp Ser
35 40 45
Gly Ala Ile Thr Leu Gln Ala Pro Leu Asp Tyr Glu Asp Gln Val Thr
50 55 60
Tyr Thr Leu Ala Ile Thr Ala Arg Asp Asn Gly Ile Pro Gln Lys Ala
65 70 75 80
Asp Thr Thr Tyr Val Glu Val Met Val Asn
85 90

<210> 196

<211> 45

<212> PRT

<213> Homo sapiens

<400> 196

Cys Ala Pro Asn Asn Pro Cys Ser Asn Gly Gly Thr Cys Val Asn Thr
1 5 10 15
Pro Gly Gly Ser Ser Asp Asn Phe Gly Gly Tyr Thr Cys Glu Cys Pro

20 25 30

Pro Gly Asp Tyr Tyr Leu Ser Tyr Thr Gly Lys Arg Cys
35 40 45

<210> 197
<211> 45
<212> PRT
<213> Homo sapiens

<400> 197
Cys Ala Pro Asn Asn Pro Cys Ser Asn Gly Gly Thr Cys Val Asn Thr
1 5 10 15

Pro Gly Gly Ser Ser Asp Asn Phe Gly Gly Tyr Thr Cys Glu Cys Pro
20 25 30

Pro Gly Asp Tyr Tyr Leu Ser Tyr Thr Gly Lys Arg Cys
35 40 45

<210> 198
<211> 45
<212> PRT
<213> Homo sapiens

<400> 198
Cys Ala Pro Asn Asn Pro Cys Ser Asn Gly Gly Thr Cys Val Asn Thr
1 5 10 15

Pro Gly Gly Ser Ser Asp Asn Phe Gly Gly Tyr Thr Cys Glu Cys Pro
20 25 30

Pro Gly Asp Tyr Tyr Leu Ser Tyr Thr Gly Lys Arg Cys
35 40 45

<210> 199
<211> 45
<212> PRT
<213> Homo sapiens

<400> 199
Cys Ala Pro Asn Asn Pro Cys Ser Asn Gly Gly Thr Cys Val Asn Thr
1 5 10 15

Pro Gly Gly Ser Ser Asp Asn Phe Gly Gly Tyr Thr Cys Glu Cys Pro
20 25 30

Pro Gly Asp Tyr Tyr Leu Ser Tyr Thr Gly Lys Arg Cys
35 40 45

<210> 200
<211> 45
<212> PRT

<213> Homo sapiens

<400> 200

Cys Ala Pro Asn Asn Pro Cys Ser Asn Gly Gly Thr Cys Val Asn Thr
1 5 10 15

Pro Gly Gly Ser Ser Asp Asn Phe Gly Gly Tyr Thr Cys Glu Cys Pro
20 25 30

Pro Gly Asp Tyr Tyr Leu Ser Tyr Thr Gly Lys Arg Cys
35 40 45

<210> 201

<211> 45

<212> PRT

<213> Homo sapiens

<400> 201

Cys Ala Pro Asn Asn Pro Cys Ser Asn Gly Gly Thr Cys Val Asn Thr
1 5 10 15

Pro Gly Gly Ser Ser Asp Asn Phe Gly Gly Tyr Thr Cys Glu Cys Pro
20 25 30

Pro Gly Asp Tyr Tyr Leu Ser Tyr Thr Gly Lys Arg Cys
35 40 45

<210> 202

<211> 45

<212> PRT

<213> Homo sapiens

<400> 202

Cys Ala Pro Asn Asn Pro Cys Ser Asn Gly Gly Thr Cys Val Asn Thr
1 5 10 15

Pro Gly Gly Ser Ser Asp Asn Phe Gly Gly Tyr Thr Cys Glu Cys Pro
20 25 30

Pro Gly Asp Tyr Tyr Leu Ser Tyr Thr Gly Lys Arg Cys
35 40 45

<210> 203

<211> 18

<212> PRT

<213> Homo sapiens

<400> 203

Leu Pro Cys Glu Glu Val Thr Ser Ile Ile Glu Arg Asp Asn Ile Asp
1 5 10 15

Phe Lys

<210> 204
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 204
 Phe Asp Arg Pro Arg Gly Val Ala Val Asp Pro Ser Asp Gly Gln Ile
 1 5 10 15
 Val Val Ala Asp Gln Ser Glu Asn His Arg Ile Gln Val Phe
 20 25 30

<210> 205
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 205
 Phe Asp Arg Pro Arg Gly Val Ala Val Asp Pro Ser Asp Gly Gln Ile
 1 5 10 15
 Val Val Ala Asp Gln Ser Glu Asn His Arg Ile Gln Val Phe
 20 25 30

<210> 206
 <211> 28
 <212> PRT
 <213> Homo sapiens

<400> 206
 Leu Lys Val Glu Phe Asp Glu Leu Glu Thr Gly Leu Leu Lys Ser Ile
 1 5 10 15
 Thr Arg Lys Gln Asp Asn Lys Thr Val His Val Asn
 20 25

<210> 207
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 207
 Tyr Thr Gly Leu Val Ser Glu Asp Ala Pro Pro Phe Thr Ser Val Leu
 1 5 10 15
 Gln Ile Ser Ala Thr Asp Arg Asp Ala His Ala Asn Gly Arg Val Gln
 20 25 30
 Tyr Thr Phe Gln Asn Gly Glu Asp Gly Asp Gly Asp Phe Thr Ile Glu
 35 40 45
 Pro Thr Ser Gly Ile Val Arg Thr Val Arg Arg Leu Asp Arg Glu Ala
 50 55 60

Val Ser Val Tyr Glu Leu Thr Ala Tyr Ala Val Asp Arg Gly Val Pro
 65 70 75 80

Pro Leu Arg Thr Pro Val Ser Ile Gln Val Met Val Gln
 85 90

<210> 208

<211> 89

<212> PRT

<213> Homo sapiens

<400> 208

Phe Glu Val Arg Val Lys Glu Asn Ser Ile Val Gly Ser Val Val Ala
 1 5 10 15

Gln Ile Thr Ala Val Asp Pro Asp Glu Gly Pro Asn Ala His Ile Met
 20 25 30

Tyr Gln Ile Val Glu Gly Asn Ile Pro Glu Leu Phe Gln Met Asp Ile
 35 40 45

Phe Ser Gly Glu Leu Thr Ala Leu Ile Asp Leu Asp Tyr Glu Ala Arg
 50 55 60

Gln Glu Tyr Val Ile Val Val Gln Ala Thr Ser Ala Pro Leu Val Ser
 65 70 75 80

Arg Ala Thr Val His Val Arg Leu Val
 85

<210> 209

<211> 32

<212> PRT

<213> Homo sapiens

<400> 209

Cys Tyr Ser Asn Pro Cys Arg Asn Gly Gly Ala Cys Ala Arg Arg Glu
 1 5 10 15

Gly Gly Tyr Thr Cys Val Cys Arg Pro Arg Phe Thr Gly Glu Asp Cys
 20 25 30

<210> 210

<211> 35

<212> PRT

<213> Homo sapiens

<400> 210

Cys Val Pro Gly Val Cys Arg Asn Gly Gly Thr Cys Thr Asp Ala Pro
 1 5 10 15

Asn Gly Gly Phe Arg Cys Gln Cys Pro Ala Gly Gly Ala Phe Glu Gly
 20 25 30

Pro Arg Cys
 35

<210> 211
 <211> 65
 <212> PRT
 <213> Homo sapiens

<400> 211
 Phe Ala Thr Val Gln Gln Ser Gly Leu Leu Phe Tyr Asn Gly Arg Leu
 1 5 10 15

Asn Glu Lys His Asp Phe Leu Ala Leu Glu Leu Val Ala Gly Gln Val
 20 25 30

Arg Leu Thr Tyr Ser Thr Gly Glu Ser Asn Thr Val Val Ser Pro Thr
 35 40 45

Val Pro Gly Gly Leu Ser Asp Gly Gln Trp His Thr Val His Leu Arg
 50 55 60

Lys
 65

<210> 212
 <211> 17
 <212> PRT
 <213> Homo sapiens

<400> 212
 Gly Ile Asp Leu Gly Gly Thr Lys Ile Glu Leu Ala Leu Val Asp Glu
 1 5 10 15

Asp

<210> 213
 <211> 12
 <212> PRT
 <213> Homo sapiens

<400> 213
 Pro Val Ala Glu Ala Ile Ala Lys Glu Ile Lys Lys
 1 5 10

<210> 214
 <211> 360
 <212> PRT
 <213> Homo sapiens

406. 214

Met	Pro	Leu	Leu	Gly	Leu	Gly	Thr	Trp	Gln	Thr	Pro	Gly	Glu	Glu	Asp	1	5	10	15
Tyr	Leu	Trp	Gly	Arg	Val	Asp	Lys	Glu	Glu	Ala	Lys	Glu	Ala	Val	Lys	20	25	30	
Ala	Ala	Leu	Asp	Ala	Gly	Tyr	Arg	His	Ile	Asp	Thr	Ala	Ala	Ile	Tyr	35	40	45	
Gly	Asn	Gly	Gln	Lys	Pro	Gly	Gln	Ser	Glu	Glu	Glu	Val	Gly	Glu	Ala	50	55	60	
Ile	Lys	Glu	Ala	Leu	Glu	Glu	Gly	Ser	Val	Val	Val	Ile	Thr	Lys	Tyr	65	70	75	80
Lys	Arg	Glu	Asp	Ile	Phe	Ile	Thr	Ser	Asp	Lys	Leu	Trp	Asn	Thr	Phe	85	90	95	
Gly	Pro	Asp	Leu	Ser	Glu	Tyr	Gly	His	Ser	Pro	Lys	His	Val	Arg	Glu	100	105	110	
Ala	Leu	Glu	Lys	Ser	Leu	Lys	Arg	Leu	Gly	Leu	Asp	Tyr	Val	Asp	Leu	115	120	125	
Tyr	Leu	Ile	His	Trp	Pro	Asp	Pro	Phe	Lys	Pro	Gly	Ile	Glu	Asp	Lys	130	135	140	
Tyr	Pro	Leu	Gly	Phe	Pro	Thr	Asp	Asp	Asp	Gly	Lys	Leu	Ile	Tyr	Glu	145	150	155	160
Asp	Val	Pro	Ile	Glu	Glu	Thr	Trp	Lys	Ala	Leu	Glu	Lys	Leu	Val	Asp	165	170	175	
Glu	Gly	Lys	Val	Arg	Ser	Ile	Gly	Val	Ser	Asn	Phe	Ser	Ala	Glu	Gln	180	185	190	
Leu	Glu	Glu	Leu	Leu	Ser	Tyr	Ala	Gly	Lys	Leu	Lys	Leu	Ile	Pro	Pro	195	200	205	
Val	Val	Asn	Gln	Val	Glu	Leu	His	Pro	Tyr	Leu	Arg	Gln	Asp	Glu	Leu	210	215	220	
Arg	Lys	Val	Pro	Leu	Leu	Pro	Phe	Cys	Lys	Ser	His	Gly	Ile	Ala	Val	225	230	235	240
Thr	Ala	Tyr	Ser	Pro	Leu	Gly	Ser	Gly	Leu	Leu	Thr	Gly	Lys	Tyr	Lys	245	250	255	
Thr	Glu	Glu	Asp	Ile	Pro	Gly	Asp	Arg	Arg	Ser	Leu	Leu	Gly	Ala	Asp	260	265	270	
Lys	Gly	Trp	Ser	Glu	Leu	Gly	Ser	Pro	Glu	Leu	Leu	Glu	Asp	Pro	Val	275	280	285	
Leu	Lys	Ala	Ile	Ala	Glu	Lys	Tyr	Gly	Tyr	Lys	Asp	Lys	Thr	Phe	Ala				

290

295

300

Gln Val Ala Leu Arg Trp Ala Leu Gln Arg Gly Gly Ala Gly Val
 305 310 315 320

Val Val Val Ile Pro Lys Ser Ser Asn Pro Glu Arg Ile Lys Glu Asn
 325 330 335

Leu Lys Ala Phe Asp Asp Phe Glu Leu Thr Glu Glu Asp Met Lys Ala
 340 345 350

Ile Asp Glu Leu Asp Arg Gly Lys
 355 360

<210> 215

<211> 17

<212> PRT

<213> Homo sapiens

<400> 215

Gly Ile Asp Leu Gly Gly Thr Lys Ile Glu Leu Ala Leu Val Asp Glu
 1 5 10 15

Asp

<210> 216

<211> 139

<212> PRT

<213> Homo sapiens

<400> 216

Met Pro Leu Leu Gly Leu Gly Thr Trp Gln Thr Pro Gly Glu Glu Asp
 1 5 10 15

Tyr Leu Trp Gly Arg Val Asp Lys Glu Glu Ala Lys Glu Ala Val Lys
 20 25 30

Ala Ala Leu Asp Ala Gly Tyr Arg His Ile Asp Thr Ala Ala Ile Tyr
 35 40 45

Gly Asn Gly Gln Lys Pro Gly Gln Ser Glu Glu Glu Val Gly Glu Ala
 50 55 60

Ile Lys Glu Ala Leu Glu Glu Gly Ser Val Val Val Ile Thr Lys Tyr
 65 70 75 80

Lys Arg Glu Asp Ile Phe Ile Thr Ser Asp Lys Leu Trp Asn Thr Phe
 85 90 95

Gly Pro Asp Leu Ser Glu Tyr Gly His Ser Pro Lys His Val Arg Glu
 100 105 110

Ala Leu Glu Lys Ser Leu Lys Arg Leu Gly Leu Asp Tyr Val Asp Leu
 115 120 125

Tyr Leu Ile His Trp Pro Asp Pro Phe Lys Pro
130 135

<210> 217
<211> 64
<212> PRT
<213> Homo sapiens

<400> 217
Pro Thr Asp Asp Asp Gly Lys Leu Ile Tyr Glu Asp Val Pro Ile Glu
1 5 10 15
Glu Thr Trp Lys Ala Leu Glu Lys Leu Val Asp Glu Gly Lys Val Arg
20 25 30
Ser Ile Gly Val Ser Asn Phe Ser Ala Glu Gln Leu Glu Glu Leu Leu
35 40 45
Ser Tyr Ala Gly Lys Leu Lys Leu Ile Pro Pro Val Val Asn Gln Val
50 55 60

<210> 218
<211> 54
<212> PRT
<213> Homo sapiens

<400> 218
Ala Leu Arg Trp Ala Leu Gln Arg Gly Gly Gly Ala Gly Val Val Val
1 5 10 15
Val Ile Pro Lys Ser Ser Asn Pro Glu Arg Ile Lys Glu Asn Leu Lys
20 25 30
Ala Phe Asp Asp Phe Glu Leu Thr Glu Glu Asp Met Lys Ala Ile Asp
35 40 45
Glu Leu Asp Arg Gly Lys
50

<210> 219
<211> 267
<212> PRT
<213> Homo sapiens

<400> 219
Met Lys Ala Ala Val Leu Thr Leu Ala Val Leu Phe Leu Thr Gly Ser
1 5 10 15
Gln Ala Arg His Phe Trp Gln Gln Asp Glu Pro Pro Gln Ser Pro Trp
20 25 30

Asp Arg Val Lys Asp Leu Ala Thr Val Tyr Val Asp Val Leu Lys Asp
 35 40 45
 Ser Gly Arg Asp Tyr Val Ser Gln Phe Glu Gly Ser Ala Leu Gly Lys
 50 55 60
 Gln Leu Asn Leu Lys Leu Asp Asn Trp Asp Ser Val Thr Ser Thr
 65 70 75 80
 Phe Ser Lys Leu Arg Glu Gln Leu Gly Pro Val Thr Gln Glu Phe Trp
 85 90 95
 Asp Asn Leu Glu Lys Glu Thr Glu Gly Leu Arg Gln Glu Met Ser Lys
 100 105 110
 Asp Leu Glu Glu Val Lys Ala Lys Val Gln Pro Tyr Leu Asp Asp Phe
 115 120 125
 Gln Lys Lys Trp Gln Glu Glu Met Glu Leu Tyr Arg Gln Lys Val Glu
 130 135 140
 Pro Leu Arg Ala Glu Leu Gln Glu Gly Ala Arg Gln Lys Leu His Glu
 145 150 155 160
 Leu Gln Glu Lys Leu Ser Pro Leu Gly Glu Glu Met Arg Asp Arg Ala
 165 170 175
 Arg Ala His Val Asp Ala Leu Arg Thr His Leu Ala Pro Tyr Ser Asp
 180 185 190
 Glu Leu Arg Gln Arg Leu Ala Ala Arg Leu Glu Ala Leu Lys Glu Asn
 195 200 205
 Gly Gly Ala Arg Leu Ala Glu Tyr His Ala Lys Ala Thr Glu His Leu
 210 215 220
 Ser Thr Leu Ser Glu Lys Ala Lys Pro Ala Leu Glu Asp Leu Arg Gln
 225 230 235 240
 Gly Leu Leu Pro Val Leu Glu Ser Phe Lys Val Ser Phe Leu Ser Ala
 245 250 255
 Leu Glu Glu Tyr Thr Lys Lys Leu Asn Thr Gln
 260 265

<210> 220

<211> 249

<212> PRT

<213> Homo sapiens

<400> 220

Arg His Phe Phe Gln Gln Asp Glu Pro Pro Gln Ser Pro Trp Asp Arg
 1 5 10 15

Val Lys Asp Leu Ala Thr Val Tyr Val Asp Val Leu Lys Asp Ser Gly

20					25					30						
Arg	Asp	Tyr	Val	Ser	Gln	Phe	Glu	Gly	Ser	Ala	Leu	Gly	Lys	Gln	Leu	
35					40					45						
Asn	Leu	Lys	Leu	Leu	Asp	Asn	Trp	Asp	Ser	Val	Thr	Ser	Thr	Phe	Ser	
50					55					60						
Lys	Leu	Arg	Glu	Gln	Leu	Gly	Pro	Val	Thr	Gln	Glu	Phe	Trp	Asp	Asn	
65					70					75					80	
Leu	Glu	Lys	Glu	Thr	Glu	Gly	Leu	Arg	Gln	Glu	Met	Ser	Lys	Asp	Leu	
85					90					95						
Glu	Glu	Val	Lys	Ala	Lys	Val	Gln	Pro	Tyr	Leu	Asp	Asp	Phe	Gln	Lys	
100					105					110						
Lys	Trp	Gln	Glu	Glu	Met	Glu	Leu	Tyr	Arg	Gln	Lys	Val	Glu	Pro	Leu	
115					120					125						
Arg	Ala	Glu	Leu	Gln	Glu	Gly	Ala	Arg	Gln	Lys	Leu	His	Glu	Leu	Gln	
130					135					140						
Glu	Lys	Leu	Ser	Pro	Leu	Gly	Glu	Glu	Met	Arg	Asp	Arg	Ala	Arg	Ala	
145					150					155					160	
His	Val	Asp	Ala	Leu	Arg	Thr	His	Leu	Ala	Pro	Tyr	Ser	Asp	Glu	Leu	
165					170					175						
Arg	Gln	Arg	Leu	Ala	Ala	Arg	Leu	Glu	Ala	Leu	Lys	Glu	Asn	Gly	Gly	
180					185					190						
Ala	Arg	Leu	Ala	Glu	Tyr	His	Ala	Lys	Ala	Thr	Glu	His	Leu	Ser	Thr	
195					200					205						
Leu	Ser	Glu	Lys	Ala	Lys	Pro	Ala	Leu	Glu	Asp	Leu	Arg	Gln	Gly	Leu	
210					215					220						
Leu	Pro	Val	Leu	Glu	Ser	Phe	Lys	Val	Ser	Phe	Leu	Ser	Ala	Leu	Glu	
225					230					235					240	
Glu	Tyr	Thr	Lys	Lys	Leu	Asn	Thr	Gln								
245																

<210> 221

<211> 243

<212> PRT

<213> Homo sapiens

<400> 221

Asp	Glu	Pro	Pro	Gln	Ser	Pro	Trp	Asp	Arg	Val	Lys	Asp	Leu	Ala	Thr
1				5					10				15		

Val	Tyr	Val	Asp	Val	Leu	Lys	Asp	Ser	Gly	Arg	Asp	Tyr	Val	Ser	Gln
	20							25					30		

Phe Glu Gly Ser Ala Leu Gly Lys Gln Leu Asn Leu Lys Leu Leu Asp
 35 40 45
 Asn Trp Asp Ser Val Thr Ser Thr Phe Ser Lys Leu Arg Glu Gln Leu
 50 55 60
 Gly Pro Val Thr Gln Glu Phe Trp Asp Asn Leu Glu Lys Glu Thr Glu
 65 70 75 80
 Gly Leu Arg Gln Glu Met Ser Lys Asp Leu Glu Glu Val Lys Ala Lys
 85 90 95
 Val Gln Pro Tyr Leu Asp Asp Phe Gln Lys Lys Trp Gln Glu Glu Met
 100 105 110
 Glu Leu Tyr Arg Gln Lys Val Glu Pro Leu Arg Ala Glu Leu Gln Glu
 115 120 125
 Gly Ala Arg Gln Lys Leu His Glu Leu Gln Glu Lys Leu Ser Pro Leu
 130 135 140
 Gly Glu Glu Met Arg Asp Arg Ala Arg Ala His Val Asp Ala Leu Arg
 145 150 155 160
 Thr His Leu Ala Pro Tyr Ser Asp Glu Leu Arg Gln Arg Leu Ala Ala
 165 170 175
 Arg Leu Glu Ala Leu Lys Glu Asn Gly Gly Ala Arg Leu Ala Glu Tyr
 180 185 190
 His Ala Lys Ala Thr Glu His Leu Ser Thr Leu Ser Glu Lys Ala Lys
 195 200 205
 Pro Ala Leu Glu Asp Leu Arg Gln Gly Leu Leu Pro Val Leu Glu Ser
 210 215 220
 Phe Lys Val Ser Phe Leu Ser Ala Leu Glu Glu Tyr Thr Lys Lys Leu
 225 230 235 240
 Asn Thr Gln

<210> 222

<211> 200

<212> PRT

<213> Unknown Organism

<220>

<223> Description of Unknown Organism: unidentified

<400> 222

Leu Lys Leu Leu Asp Asn Trp Asp Ser Val Thr Ser Thr Phe Ser Lys
 1 5 10 15
 Leu Arg Glu Gln Leu Gly Pro Val Thr Gln Glu Phe Trp Asp Asn Leu
 20 25 30

Glu Lys Glu Thr Glu Gly Leu Arg Gln Glu Met Ser Lys Asp Leu Glu
 35 40 45
 Glu Val Lys Ala Lys Val Gln Pro Tyr Leu Asp Asp Phe Gln Lys Lys
 50 55 60
 Trp Gln Glu Glu Met Glu Leu Tyr Arg Gln Lys Val Glu Pro Leu Arg
 65 70 75 80
 Ala Glu Leu Gln Glu Gly Ala Arg Gln Lys Leu His Glu Leu Gln Glu
 85 90 95
 Lys Leu Ser Pro Leu Gly Glu Glu Met Arg Asp Cys Ala Arg Ala His
 100 105 110
 Val Asp Ala Leu Arg Thr His Leu Ala Pro Tyr Ser Asp Glu Leu Arg
 115 120 125
 Gln Arg Leu Ala Ala Arg Leu Glu Ala Leu Lys Glu Asn Gly Gly Ala
 130 135 140
 Arg Leu Ala Glu Tyr His Ala Lys Ala Thr Glu His Leu Ser Thr Leu
 145 150 155 160
 Ser Glu Lys Ala Lys Pro Ala Leu Glu Asp Leu Arg Gln Gly Leu Leu
 165 170 175
 Pro Val Leu Glu Ser Phe Lys Val Ser Phe Leu Ser Ala Leu Glu Glu
 180 185 190
 Tyr Thr Lys Lys Leu Asn Thr Gln
 195 200

<210> 223

<211> 267

<212> PRT

<213> Cynomolgus monkey

<400> 223

Met Lys Ala Thr Val Leu Thr Leu Ala Val Leu Phe Leu Thr Gly Ser
 1 5 10 15
 Gln Ala Arg His Phe Trp Gln Gln Asp Glu Pro Pro Gln Thr Pro Trp
 20 25 30
 Asp Arg Val Lys Asp Leu Val Thr Val Tyr Val Glu Ala Leu Lys Asp
 35 40 45
 Ser Gly Lys Asp Tyr Val Ser Gln Phe Glu Gly Ser Ala Leu Gly Lys
 50 55 60
 Gln Leu Asn Leu Lys Leu Leu Asp Asn Trp Asp Ser Val Thr Ser Thr
 65 70 75 80
 Val Ser Lys Leu Arg Glu Gln Leu Gly Pro Val Thr Gln Glu Phe Trp

85

90

95

Asp Asn Leu Glu Lys Glu Thr Glu Gly Leu Arg Gln Glu Met Ser Lys
 100 105 110
 Asp Leu Glu Glu Val Lys Ala Lys Val Gln Pro Tyr Leu Asp Asp Phe
 115 120 125
 Gln Lys Lys Trp Gln Glu Glu Met Glu Leu Tyr Arg Gln Lys Val Glu
 130 135 140
 Pro Leu Arg Ala Glu Leu His Glu Gly Thr Arg Gln Lys Leu His Glu
 145 150 155 160
 Leu His Glu Lys Leu Ser Pro Leu Gly Glu Glu Val Arg Asp Arg Ala
 165 170 175
 Arg Ala His Val Asp Ala Leu Arg Thr His Leu Ala Pro Tyr Ser Asp
 180 185 190
 Glu Leu Arg Gln Arg Leu Ala Ala Arg Leu Glu Ala Leu Lys Glu Asn
 195 200 205
 Gly Gly Ala Arg Leu Ala Glu Tyr His Ala Lys Ala Ser Glu His Leu
 210 215 220
 Ser Thr Leu Ser Glu Lys Ala Lys Pro Ala Leu Glu Asp Leu Arg Gln
 225 230 235 240
 Gly Leu Leu Pro Val Leu Glu Ser Phe Lys Val Ser Phe Leu Ser Ala
 245 250 255
 Leu Glu Glu Tyr Thr Lys Lys Leu Ser Thr Gln
 260 265

<210> 224

<211> 20

<212> PRT

<213> Homo sapiens

<400> 224

Met Ala Thr Thr Tyr Glu Glu Phe Ala Ala Lys Leu Asp Arg Leu Asp
 1 5 10 15
 Glu Glu Phe Asn Lys Lys Met Glu Glu Gln Asn Ala Lys Phe Phe Ala
 20 25 30
 Asp Lys Pro Asp Glu Ser Thr Leu Ser Pro Glu Met Lys Glu His Tyr
 35 40 45
 Glu Lys Phe Glu Lys Met Ile Gln Glu His Thr Asp Lys Phe Asn Lys
 50 55 60
 Lys Met Arg Glu His Ser Glu His Phe Lys Gln Lys Phe Ala Glu Leu
 65 70 75 80

Leu Glu Gln Gln Lys Asn Ala Gln Tyr Pro
85 90

<210> 225

<211> 277

<212> PPT

<213> Homo sapiens

<400> 225

Lys Ala Leu Val Leu Ala Leu Ala Leu Leu Leu Thr Gly Cys Gln
1 5 10 15

Ala Arg Ser Phe Trp Gln Ala Asp Glu Pro Glu Val Thr Glu Gln Ala
20 25 30

Trp Gln Gln Ser Gln Trp Asp Gln Val Lys Asp Arg Phe Trp Val Tyr
35 40 45

Leu Arg Gln Val Lys Asp Ser Ser Asp Gln Ala Val Glu Gln Leu Glu
50 55 60

Ser Ser Gln Val Thr Gln Glu Leu Asn Leu Leu Leu Glu Asp Asn Leu
65 70 75 80

Asp Glu Leu Lys Ser Tyr Ala Glu Glu Leu Gln Glu Gln Leu Gly Pro
85 90 95

Val Ala Gln Glu Phe Gln Ala Arg Leu Ser Lys Glu Thr Gln Ala Leu
100 105 110

Arg Ala Glu Leu Gly Lys Asp Leu Glu Asp Val Arg Asn Arg Leu Ala
115 120 125

Pro Tyr Arg Asp Glu Val Gln Ala Met Leu Gly Gln Asn Leu Glu Glu
130 135 140

Tyr Arg Gln Arg Leu Glu Pro Leu Ala Arg Glu Leu Arg Lys Arg Leu
145 150 155 160

Arg Arg Asp Ala Glu Glu Leu Gln Lys Arg Leu Ala Pro Tyr Ala Glu
165 170 175

Glu Leu Arg Glu Arg Ala Glu Arg Asn Val Asp Ala Leu Arg Glu Arg
180 185 190

Leu Gly Pro Tyr Val Glu Gln Leu Arg Gln Lys Ala Ala Thr Leu Leu
195 200 205

Thr Gln Arg Leu Glu Glu Leu Arg Glu Arg Ala Gln Pro Tyr Ala Glu
210 215 220

Glu Tyr Lys Glu Gln Leu Glu Glu Gln Leu Ser Glu Leu Arg Glu Lys
225 230 235 240

Leu Ala Pro Val Arg Glu Asp Leu Gln Glu Val Leu Thr Pro Val Leu
245 250 255

Glu Gln Ala Gln Leu Lys Leu Gln Ala Glu Ala Phe Gln Glu Glu Leu
260 265 270

Lys Lys Lys Leu Glu
275

<210> 226

<211> 267

<212> PRT

<213> Homo sapiens

<400> 226

Met Lys Ala Ala Val Leu Thr Leu Ala Val Leu Phe Leu Thr Gly Ser
1 5 10 15

Gln Ala Arg His Phe Trp Gln Gln Asp Glu Pro Pro Gln Ser Pro Trp
20 25 30

Asp Arg Val Lys Asp Leu Ala Thr Val Tyr Val Asp Val Leu Lys Asp
35 40 45

Ser Gly Arg Asp Tyr Val Ser Gln Phe Glu Gly Ser Ala Leu Gly Lys
50 55 60

Gln Leu Asn Leu Lys Leu Leu Asp Asn Trp Asp Ser Val Thr Ser Thr
65 70 75 80

Phe Ser Lys Leu Arg Glu Gln Leu Gly Pro Val Thr Gln Glu Phe Trp
85 90 95

Asp Asn Leu Glu Lys Glu Thr Glu Gly Leu Arg Gln Glu Met Ser Lys
100 105 110

Asp Leu Glu Glu Val Lys Ala Lys Val Gln Pro Tyr Leu Asp Asp Phe
115 120 125

Gln Lys Lys Trp Gln Glu Glu Met Glu Leu Tyr Arg Gln Lys Val Glu
130 135 140

Pro Leu Arg Ala Glu Leu Gln Glu Gly Ala Arg Gln Lys Leu His Glu
145 150 155 160

Leu Gln Glu Lys Leu Ser Pro Leu Gly Glu Glu Met Arg Asp Arg Ala
165 170 175

Arg Ala His Val Asp Ala Leu Arg Thr His Leu Ala Pro Tyr Ser Asp
180 185 190

Glu Leu Arg Gln Arg Leu Ala Ala Arg Leu Glu Ala Leu Lys Glu Asn
195 200 205

Gly Gly Ala Arg Leu Ala Glu Tyr His Ala Lys Ala Thr Glu His Leu
210 215 220

Ser Thr Leu Ser Glu Lys Ala Lys Pro Ala Leu Glu Asp Leu Arg Gln

Leu Pro Val Leu Glu Ser Phe Lys Val Ser Phe Leu Ser Ala Leu Glu
 225 230 235 240

Glu Tyr Thr Lys Lys Leu Asn Thr Gln
 245

<210> 228

<211> 243

<212> PPT

<213> Homo sapiens

<400> 228

Asp Glu Pro Pro Gln Ser Pro Trp Asp Arg Val Lys Asp Leu Ala Thr
 1 5 10 15

Val Tyr Val Asp Val Leu Lys Asp Ser Gly Arg Asp Tyr Val Ser Gln
 20 25 30

Phe Glu Gly Ser Ala Leu Gly Lys Gln Leu Asn Leu Lys Leu Leu Asp
 35 40 45

Asn Trp Asp Ser Val Thr Ser Thr Phe Ser Lys Leu Arg Glu Gln Leu
 50 55 60

Gly Pro Val Thr Gln Glu Phe Trp Asp Asn Leu Glu Lys Glu Thr Glu
 65 70 75 80

Gly Leu Arg Gln Glu Met Ser Lys Asp Leu Glu Glu Val Lys Ala Lys
 85 90 95

Val Gln Pro Tyr Leu Asp Asp Phe Gln Lys Lys Trp Gln Glu Glu Met
 100 105 110

Glu Leu Tyr Arg Gln Lys Val Glu Pro Leu Arg Ala Glu Leu Gln Glu
 115 120 125

Gly Ala Arg Gln Lys Leu His Glu Leu Gln Glu Lys Leu Ser Pro Leu
 130 135 140

Gly Glu Glu Met Arg Asp Arg Ala Arg Ala His Val Asp Ala Leu Arg
 145 150 155 160

Thr His Leu Ala Pro Tyr Ser Asp Glu Leu Arg Gln Arg Leu Ala Ala
 165 170 175

Arg Leu Glu Ala Leu Lys Glu Asn Gly Gly Ala Arg Leu Ala Glu Tyr
 180 185 190

His Ala Lys Ala Thr Glu His Leu Ser Thr Leu Ser Glu Lys Ala Lys
 195 200 205

Pro Ala Leu Glu Asp Leu Arg Gln Gly Leu Leu Pro Val Leu Glu Ser
 210 215 220

Phe Lys Val Ser Phe Leu Ser Ala Leu Glu Glu Tyr Thr Lys Lys Leu
 225 230 235 240

Asn Thr Gln

<210> 229

<211> 200

<212> PRT

<213> Unknown Organism

<220>

<223> Description of Unknown Organism: unidentified

<400> 229

Leu Lys Leu Leu Asp Asn Trp Asp Ser Val Thr Ser Thr Phe Ser Lys
1 5 10 15

Leu Arg Glu Gln Leu Gly Pro Val Thr Gln Glu Phe Trp Asp Asn Leu
20 25 30

Glu Lys Glu Thr Glu Gly Leu Arg Gln Glu Met Ser Lys Asp Leu Glu
35 40 45

Glu Val Lys Ala Lys Val Gln Pro Tyr Leu Asp Asp Phe Gln Lys Lys
50 55 60

Trp Gln Glu Glu Met Glu Leu Tyr Arg Gln Lys Val Glu Pro Leu Arg
65 70 75 80

Ala Glu Leu Gln Glu Gly Ala Arg Gln Lys Leu His Glu Leu Gln Glu
85 90 95

Lys Leu Ser Pro Leu Gly Glu Glu Met Arg Asp Cys Ala Arg Ala His
100 105 110

Val Asp Ala Leu Arg Thr His Leu Ala Pro Tyr Ser Asp Glu Leu Arg
115 120 125

Gln Arg Leu Ala Ala Arg Leu Glu Ala Leu Lys Glu Asn Gly Gly Ala
130 135 140

Arg Leu Ala Glu Tyr His Ala Lys Ala Thr Glu His Leu Ser Thr Leu
145 150 155 160

Ser Glu Lys Ala Lys Pro Ala Leu Glu Asp Leu Arg Gln Gly Leu Leu
165 170 175

Pro Val Leu Glu Ser Phe Lys Val Ser Phe Leu Ser Ala Leu Glu Glu
180 185 190

Tyr Thr Lys Lys Leu Asn Thr Gln
195 200

<210> 230

<211> 267

<212> PRT

<213> Cynomolgus monkey

<400> 230

Met Lys Ala Thr Val Leu Thr Leu Ala Val Leu Phe Leu Thr Gly Ser
1 5 10 15
Gln Ala Arg His Phe Trp Gln Gln Asp Glu Pro Pro Gln Thr Pro Trp
20 25 30
Asp Arg Val Lys Asp Leu Val Thr Val Tyr Val Glu Ala Leu Lys Asp
35 40 45
Ser Gly Lys Asp Tyr Val Ser Gln Phe Glu Gly Ser Ala Leu Gly Lys
50 55 60
Gln Leu Asn Leu Lys Leu Leu Asp Asn Trp Asp Ser Val Thr Ser Thr
65 70 75 80
Val Ser Lys Leu Arg Glu Gln Leu Gly Pro Val Thr Gln Glu Phe Trp
85 90 95
Asp Asn Leu Glu Lys Glu Thr Glu Gly Leu Arg Gln Glu Met Ser Lys
100 105 110
Asp Leu Glu Glu Val Lys Ala Lys Val Gln Pro Tyr Leu Asp Asp Phe
115 120 125
Gln Lys Lys Trp Gln Glu Glu Met Glu Leu Tyr Arg Gln Lys Val Glu
130 135 140
Pro Leu Arg Ala Glu Leu His Glu Gly Thr Arg Gln Lys Leu His Glu
145 150 155 160
Leu His Glu Lys Leu Ser Pro Leu Gly Glu Glu Val Arg Asp Arg Ala
165 170 175
Arg Ala His Val Asp Ala Leu Arg Thr His Leu Ala Pro Tyr Ser Asp
180 185 190
Glu Leu Arg Gln Arg Leu Ala Ala Arg Leu Glu Ala Leu Lys Glu Asn
195 200 205
Gly Gly Ala Arg Leu Ala Glu Tyr His Ala Lys Ala Ser Glu His Leu
210 215 220
Ser Thr Leu Ser Glu Lys Ala Lys Pro Ala Leu Glu Asp Leu Arg Gln
225 230 235 240
Gly Leu Leu Pro Val Leu Glu Ser Phe Lys Val Ser Phe Leu Ser Ala
245 250 255
Leu Glu Glu Tyr Thr Lys Lys Leu Ser Thr Gln
260 265

<210> 231

<211> 90

<212> PRT

<213> Homo sapiens

<400> 231

Met Ala Thr Thr Tyr Glu Glu Phe Ala Ala Lys Leu Asp Arg Leu Asp
1 5 10 15
Glu Glu Phe Asn Lys Lys Met Glu Glu Gln Asn Ala Lys Phe Phe Ala
20 25 30
Asp Lys Pro Asp Glu Ser Thr Leu Ser Pro Glu Met Lys Glu His Tyr
35 40 45
Glu Lys Phe Glu Lys Met Ile Gln Glu His Thr Asp Lys Phe Asn Lys
50 55 60
Lys Met Arg Glu His Ser Glu His Phe Lys Gln Lys Phe Ala Glu Leu
65 70 75 80
Leu Glu Gln Gln Lys Asn Ala Gln Tyr Pro
85 90

<210> 232

<211> 277

<212> PRT

<213> Homo sapiens

<400> 232

Lys Ala Leu Val Leu Ala Leu Ala Leu Leu Leu Thr Gly Cys Gln
1 5 10 15
Ala Arg Ser Phe Trp Gln Ala Asp Glu Pro Glu Val Thr Glu Gln Ala
20 25 30
Trp Gln Gln Ser Gln Trp Asp Gln Val Lys Asp Arg Phe Trp Val Tyr
35 40 45
Leu Arg Gln Val Lys Asp Ser Ser Asp Gln Ala Val Glu Gln Leu Glu
50 55 60
Ser Ser Gln Val Thr Gln Glu Leu Asn Leu Leu Leu Glu Asp Asn Leu
65 70 75 80
Asp Glu Leu Lys Ser Tyr Ala Glu Glu Leu Gln Glu Gln Leu Gly Pro
85 90 95
Val Ala Gln Glu Phe Gln Ala Arg Leu Ser Lys Glu Thr Gln Ala Leu
100 105 110
Arg Ala Glu Leu Gly Lys Asp Leu Glu Asp Val Arg Asn Arg Leu Ala
115 120 125
Pro Tyr Arg Asp Glu Val Gln Ala Met Leu Gly Gln Asn Leu Glu Glu
130 135 140
Tyr Arg Gln Arg Leu Glu Pro Leu Ala Arg Glu Leu Arg Lys Arg Leu

Gly Thr Val Gln Thr Gly Val Glu Thr Ser Lys Ala Val Leu Thr Gly
 130 135 140
 Thr Lys Asp Ala Val Ser Thr Gly Leu Thr Gly Ala Val Asn Val Ala
 145 150 155 160
 Arg Gly Ser Ile Gln Thr Gly Val Asp Thr Ser Lys Thr Val Leu Thr
 165 170 175
 Gly Thr Lys Asp Thr Val Cys Ser Gly Val Thr Ser Ala Met Asn Val
 180 185 190
 Ala Lys Gly Thr Ile Gln Thr Gly Val Asp Thr Ser Lys Thr Val Leu
 195 200 205
 Thr Gly Thr Lys Asp Thr Val Cys Ser Gly Val Thr Gly Ala Met Asn
 210 215 220
 Val Ala Lys Gly Thr Ile Gln Thr Gly Val Asp Thr Ser Lys Thr Val
 225 230 235 240
 Leu Thr Gly Thr Lys Asp Thr Val Cys Ser Gly Val Thr Gly Ala Met
 245 250 255
 Asn Val Ala Lys Gly Thr Ile Gln Thr Gly Val Asp Thr Thr Lys Thr
 260 265 270
 Val Leu Thr Gly Thr Lys Asn Thr Val Cys Ser Gly Val Thr Gly Ala
 275 280 285
 Val Asn Leu Ala Lys Glu Ala Ile Gln Gly Gly Leu Asp Thr Thr Lys
 290 295 300
 Ser Met Val Met Gly Thr Lys Asp Thr Met Ser Thr Gly Leu Thr Gly
 305 310 315 320
 Ala Ala Asn Val Ala Lys Gly Ala Met Gln Thr Gly Leu Asn Thr Thr
 325 330 335
 Gln Asn Ile Ala Thr Gly Thr Lys Asp Thr Val Cys Ser Gly Val Thr
 340 345 350
 Gly Ala Met Asn Leu Ala Arg Gly Thr Ile Gln Thr Gly Val Asp Thr
 355 360 365
 Thr Lys Ile Val Leu Thr Gly Thr Lys Asp Thr Val Cys Ser Gly Val
 370 375 380
 Thr Gly Ala Ala Asn Val Ala Lys Gly Ala Val Gln Gly Gly Leu Asp
 385 390 395 400
 Thr Thr Lys Ser Val Leu Thr Gly Thr Lys Asp Ala Val Ser Thr Gly
 405 410 415
 Leu Thr Gly Ala Val Asn Val Ala Lys Gly Thr Val Gln Thr Gly Val
 420 425 430

Asp	Thr	Thr	Lys	Thr	Val	Leu	Thr	Gly	Thr	Lys	Asp	Thr	Val	Cys	Ser	435	440	445
Gly	Val	Thr	Ser	Ala	Val	Asn	Val	Ala	Lys	Gly	Ala	Val	Gln	Gly	Gly	450	455	460
Leu	Asp	Thr	Thr	Lys	Ser	Val	Val	Ile	Gly	Thr	Lys	Asp	Thr	Met	Ser	465	470	475
Thr	Gly	Leu	Thr	Gly	Ala	Ala	Asn	Val	Ala	Lys	Gly	Ala	Val	Gln	Thr	485	490	495
Gly	Val	Asp	Thr	Ala	Lys	Thr	Val	Leu	Thr	Gly	Thr	Lys	Asp	Thr	Val	500	505	510
Thr	Thr	Gly	Leu	Val	Gly	Ala	Val	Asn	Val	Ala	Lys	Gly	Thr	Val	Gln	515	520	525
Thr	Gly	Met	Asp	Thr	Thr	Lys	Thr	Val	Leu	Thr	Gly	Thr	Lys	Asp	Thr	530	535	540
Ile	Tyr	Ser	Gly	Val	Thr	Ser	Ala	Val	Asn	Val	Ala	Lys	Gly	Ala	Val	545	550	555
Gln	Thr	Gly	Leu	Lys	Thr	Thr	Gln	Asn	Ile	Ala	Thr	Gly	Thr	Lys	Asn	565	570	575
Thr	Phe	Gly	Ser	Gly	Val	Thr	Gly	Ala	Val	Asn	Val	Ala	Lys	Gly	Ala	580	585	590
Val	Gln	Thr	Gly	Val	Asp	Thr	Ala	Lys	Thr	Val	Leu	Thr	Gly	Thr	Lys	595	600	605
Asp	Thr	Val	Thr	Thr	Gly	Leu	Met	Gly	Ala	Val	Asn	Val	Ala	Lys	Gly	610	615	620
Thr	Val	Gln	Thr	Ser	Val	Asp	Thr	Thr	Lys	Thr	Val	Leu	Thr	Gly	Thr	625	630	635
Lys	Asp	Thr	Val	Cys	Ser	Gly	Val	Thr	Gly	Ala	Ala	Asn	Val	Ala	Lys	645	650	655
Gly	Ala	Val	Gln	Thr	Gly	Val	Asp	Thr	Ala	Lys	Thr	Val	Leu	Thr	Gly	660	665	670
Thr	Lys	Asp	Thr	Val	Cys	Ser	Gly	Val	Thr	Gly	Ala	Val	Asn	Val	Ala	675	680	685
Lys	Gly	Ala	Val	Gln	Thr	Gly	Leu	Lys	Thr	Thr	Gln	Asn	Ile	Ala	Thr	690	695	700
Gly	Thr	Lys	Asn	Thr	Leu	Gly	Ser	Gly	Val	Thr	Gly	Ala	Ala	Asn	Val	705	710	715
Ala	Lys	Gly	Ala	Val	Gln	Gly	Gly	Leu	Asp	Thr	Thr	Lys	Ser	Val	Leu	725	730	735

Thr Gly Thr Lys Asp Ala Val Ser Thr Gly Leu Thr Gly Ala Val Asn
 740 745 750
 Leu Ala Lys Gly Thr Val Gln Thr Gly Met Asp Thr Thr Lys Thr Val
 755 760 765
 Leu Thr Gly Thr Lys Asp Ala Val Cys Ser Gly Val Thr Gly Ala Ala
 770 775 780
 Asn Val Ala Lys Gly Ala Val Gln Thr Gly Val Asp Thr Ala Lys Thr
 785 790 795 800
 Val Leu Thr Gly Thr Lys Asp Thr Val Thr Thr Gly Leu Met Gly Ala
 805 810 815
 Val Asn Val Ala Lys Gly Thr Val Gln Thr Ser Val Asp Thr Thr Lys
 820 825 830
 Thr Val Leu Thr Gly Thr Lys Asp Thr Val Cys Ser Gly Val Thr Gly
 835 840 845
 Ala Ala Asn Val Ala Lys Gly Ala Val Gln Gly Gly Leu Asp Thr Thr
 850 855 860
 Lys Ser Val Leu Thr Gly Thr Lys Asp Thr Val Ser Thr Gly Leu Thr
 865 870 875 880
 Gly Ala Val Asn Leu Ala Lys Gly Thr Val Gln Thr Gly Val Asp Thr
 885 890 895
 Ser Lys Thr Val Leu Thr Gly Thr Lys Asp Thr Val Cys Ser Gly Val
 900 905 910
 Thr Gly Ala Val Asn Val Ala Lys Gly Thr Val Gln Thr Gly Val Asp
 915 920 925
 Thr Ala Lys Thr Val Leu Ser Gly Ala Lys Asp Ala Val Thr Thr Gly
 930 935 940
 Val Thr Gly Ala Val Asn Val Ala Lys Gly Thr Val Gln Thr Gly Val
 945 950 955 960
 Asp Ala Ser Lys Ala Val Leu Met Gly Thr Lys Asp Thr Val Phe Ser
 965 970 975
 Gly Val Thr Gly Ala Met Ser Met Ala Lys Gly Ala Val Gln Gly Gly
 980 985 990
 Leu Asp Thr Thr Lys Thr Val Leu Thr Gly Thr Lys Asp Ala Val Ser
 995 1000 1005
 Ala Gly Leu Met Gly Ser Gly Asn Val Ala Thr Gly Ala Thr His Thr
 1010 1015 1020
 Gly Leu Ser Thr Phe Gln Asn Trp Leu Pro Ser Thr Pro Ala Thr Ser
 1025 1030 1035 1040

Trp Gly Gly Leu Thr Ser Ser Arg Thr Thr Asp Asn Gly Gly Glu Gln
 1045 1050 1055
 Thr Ala Leu Ser Pro Gln Glu Ala Pro Phe Ser Gly Ile Ser Thr Pro
 1060 1065 1070
 Pro Asp Val Leu Ser Val Gly Pro Glu Pro Ala Trp Glu Ala Ala Ala
 1075 1080 1085
 Thr Thr Lys Gly Leu Ala Thr Asp Val Ala Thr Phe Thr Gln Gly Ala
 1090 1095 1100
 Ala Pro Gly Arg Glu Asp Thr Gly Leu Leu Thr Thr Thr His Gly Pro
 1105 1110 1115 1120
 Glu Glu Ala Pro Arg Leu Ala Met Leu Gln Asn Glu Leu Glu Gly Leu
 1125 1130 1135
 Gly Asp Ile Phe His Pro Met Asn Ala Glu Glu Gln Ala Gln Leu Ala
 1140 1145 1150
 Ala Ser Gln Pro Gly Pro Lys Val Leu Ser Ala Glu Gln Gly Ser Tyr
 1155 1160 1165
 Phe Val Arg Leu Gly Asp Leu Gly Pro Ser Phe Arg Gln Arg Ala Phe
 1170 1175 1180
 Glu His Ala Val Ser His Leu Gln His Gly Gln Phe Gln Ala Arg Asp
 1185 1190 1195 1200
 Thr Leu Ala Gln Leu Gln Asp Cys Phe Arg Leu Ile Glu Lys Ala Gln
 1205 1210 1215
 Gln Ala Pro Glu Gly Gln Pro Arg Leu Asp Gln Gly Ser Gly Ala Ser
 1220 1225 1230
 Ala Glu Asp Ala Ala Val Gln Glu Glu Arg Asp Ala Gly Val Leu Ser
 1235 1240 1245
 Arg Val Cys Gly Leu Leu Arg Gln Leu His Thr Ala Tyr Ser Gly Leu
 1250 1255 1260
 Val Ser Ser Leu Gln Gly Leu Pro Ala Glu Leu Gln Gln Pro Val Gly
 1265 1270 1275 1280
 Arg Ala Arg His Ser Leu Cys Glu Leu Tyr Gly Ile Val Ala Ser Ala
 1285 1290 1295
 Gly Ser Val Glu Glu Leu Pro Ala Glu Arg Leu Val Gln Ser Arg Glu
 1300 1305 1310
 Gly Val His Gln Ala Trp Gln Gly Leu Glu Gln Leu Leu Glu Gly Leu
 1315 1320 1325
 Gln His Asn Pro Pro Leu Ser Trp Leu Val Gly Pro Phe Ala Leu Pro
 1330 1335 1340

Ala Gly Gly Gln
1345

<210> 234
<211> 1403
<212> PPT
<213> Mus musculus

<400> 234
Met Ser Ala Ser Gly Asp Gly Thr Arg Val Pro Pro Lys Ser Lys Gly
1 5 10 15
Lys Thr Leu Ser Ser Phe Phe Gly Ser Leu Pro Gly Phe Ser Ser Ala
20 25 30
Arg Asn Leu Val Ser His Thr His Ser Ser Thr Ser Thr Lys Asp Leu
35 40 45
Gln Thr Ala Thr Asp Pro Ser Gly Thr Pro Ala Pro Ser Ser Lys Val
50 55 60
Ser Thr Asn Ser Gln Met Ala Gly Asp Ala Ala Gly Leu Leu Gln Pro
65 70 75 80
Ser Glu Gln Thr Ala Gly Asp Lys Asp Met Gly Ser Phe Ser Val Thr
85 90 95
Ser Ser Glu Asp Ala Phe Ser Gly Val Phe Gly Ile Met Asp Ala Ala
100 105 110
Lys Gly Met Val Gln Gly Gly Leu Gly Ala Thr Gln Ser Ala Leu Val
115 120 125
Gly Thr Lys Glu Ala Val Ser Gly Gly Val Met Gly Ala Val Gly Val
130 135 140
Ala Lys Gly Leu Val Lys Gly Gly Leu Asp Thr Ser Lys Asn Val Leu
145 150 155 160
Thr Asn Thr Lys Asp Thr Val Thr Thr Gly Val Met Gly Ala Ala Asn
165 170 175
Met Ala Lys Gly Thr Val Gln Thr Gly Leu Asp Thr Thr Lys Ser Val
180 185 190
Val Met Gly Thr Lys Asp Thr Val Ala Thr Gly Leu Ala Gly Ala Val
195 200 205
Asn Val Ala Lys Gly Thr Ile Gln Gly Gly Leu Asp Thr Thr Lys Ser
210 215 220
Val Val Met Gly Thr Lys Asp Thr Val Thr Thr Gly Leu Thr Gly Ala
225 230 235 240
Ala Asn Val Ala Lys Gly Val Val Gln Gly Gly Leu Asp Thr Thr Lys
245 250 255

Ser Val Val Met Gly Thr Lys Asp Thr Val Thr Thr Gly Leu Thr Gly
 260 265 270
 Ala Met Asn Val Ala Lys Gly Thr Ala Gln Met Gly Ile Asp Thr Ser
 275 280 285
 Lys Thr Val Leu Thr Gly Thr Lys Asp Thr Val Cys Ala Glv Ala Thr
 290 295 300
 Gly Ala Ile Asn Val Ala Lys Gly Ala Ala Gln Gly Gly Leu Asp Thr
 305 310 315 320
 Thr Lys Ser Val Leu Ile Gly Thr Lys Asp Thr Val Thr Thr Gly Leu
 325 330 335
 Thr Gly Ala Val Asn Val Ala Lys Gly Ala Val Gln Gly Gly Leu Asp
 340 345 350
 Thr Thr Lys Ser Val Val Met Gly Thr Lys Asp Thr Val Thr Thr Gly
 355 360 365
 Leu Thr Gly Ala Met Asn Val Ala Lys Gly Thr Ala Gln Met Gly Leu
 370 375 380
 Gly Thr Ser Lys Thr Val Leu Thr Gly Thr Lys Asp Thr Val Cys Ala
 385 390 395 400
 Gly Leu Thr Gly Ala Ile Asn Val Ala Lys Gly Ala Ala Gln Gly Gly
 405 410 415
 Leu Asp Thr Thr Lys Ser Val Leu Met Gly Thr Lys Asp Thr Val Thr
 420 425 430
 Thr Gly Leu Thr Gly Ala Val Asn Val Ala Lys Gly Thr Ile Gln Gly
 435 440 445
 Gly Leu Asp Thr Thr Lys Ser Val Val Met Gly Thr Lys Asp Thr Val
 450 455 460
 Thr Thr Gly Leu Thr Gly Ala Val Asn Val Ala Lys Gly Thr Ile Gln
 465 470 475 480
 Gly Gly Leu Asp Thr Thr Lys Ser Val Val Met Gly Thr Lys Asp Thr
 485 490 495
 Val Thr Thr Gly Leu Thr Gly Ala Val Asn Val Ala Lys Gly Ala Ala
 500 505 510
 Gln Gly Gly Leu Asp Thr Thr Lys Ser Val Val Met Gly Thr Lys Asp
 515 520 525
 Thr Val Thr Thr Gly Leu Thr Gly Ala Met Asn Val Ala Lys Gly Thr
 530 535 540
 Ala Gln Met Gly Leu Gly Thr Ser Lys Thr Val Leu Thr Gly Thr Lys
 545 550 555 560

Asp Thr Val Cys Ala Gly Leu Thr Gly Ala Ile Asn Val Ala Lys Gly
 565 570 575
 Ala Ala Gln Gly Gly Leu Asp Thr Thr Lys Ser Val Leu Met Gly Thr
 580 585 590
 Lys Asp Thr Val Thr Thr Gly Leu Thr Gly Ala Val Asn Val Ala Lys
 595 600 605
 Gly Thr Ile Gln Gly Gly Leu Asp Thr Thr Lys Ser Val Val Met Gly
 610 615 620
 Thr Lys Asp Thr Val Thr Thr Gly Leu Thr Gly Ala Val Asn Val Ala
 625 630 635 640
 Lys Gly Ala Val Gln Gly Gly Leu Asp Thr Thr Lys Ser Val Val Met
 645 650 655
 Gly Thr Lys Asp Thr Val Thr Thr Gly Leu Thr Gly Ala Leu Asn Val
 660 665 670
 Ala Lys Gly Thr Ala Gln Met Gly Ile Asp Thr Ser Lys Thr Val Leu
 675 680 685
 Ile Gly Thr Lys Asp Thr Val Cys Ala Gly Ala Thr Gly Ala Ile Asn
 690 695 700
 Met Ala Lys Gly Ala Ala Gln Gly Gly Leu Asp Thr Thr Lys Ser Val
 705 710 715 720
 Leu Met Gly Thr Lys Asp Thr Val Thr Thr Gly Leu Thr Gly Ala Ile
 725 730 735
 Asn Val Ala Lys Gly Ser Ala Gln Gly Gly Leu Asp Thr Thr Lys Ser
 740 745 750
 Val Leu Ile Gly Thr Lys Asp Thr Val Thr Thr Gly Leu Thr Gly Ala
 755 760 765
 Leu Asn Val Ala Lys Gly Thr Val Gln Thr Gly Leu Asp Thr Ser Gln
 770 775 780
 Arg Val Leu Thr Gly Thr Lys Asp Asn Val Tyr Ala Gly Val Thr Gly
 785 790 795 800
 Ala Val Asn Val Ala Lys Gly Thr Ile Gln Gly Gly Leu Asp Thr Thr
 805 810 815
 Lys Ser Val Val Met Gly Thr Lys Asp Thr Val Thr Thr Gly Leu Thr
 820 825 830
 Gly Ala Val Asn Val Ala Lys Gly Ala Val Gln Gly Gly Leu Asp Thr
 835 840 845
 Thr Lys Ser Val Val Met Gly Thr Lys Asp Thr Val Thr Thr Gly Leu
 850 855 860

Thr Gly Ala Met Asn Val Ala Lys Gly Thr Ala Gln Met Gly Ile Asp
 865 870 875 880
 Thr Ser Lys Thr Val Leu Thr Gly Thr Lys Asp Thr Val Cys Ala Gly
 885 890 895
 Leu Thr Gly Ala Ile Asn Val Ala Lys Gly Ala Thr Gln Gly Gly Leu
 900 905 910
 Asp Thr Thr Lys Ser Val Leu Met Gly Thr Lys Asp Thr Val Thr Thr
 915 920 925
 Gly Leu Thr Gly Ala Ile Asn Val Ala Lys Gly Ala Ala Gln Gly Gly
 930 935 940
 Leu Asp Thr Thr Lys Ser Val Leu Leu Gly Thr Lys Asp Thr Val Thr
 945 950 955 960
 Thr Gly Leu Thr Gly Ala Ala Asn Val Ala Lys Glu Thr Val Gln Met
 965 970 975
 Gly Leu Asp Thr Ser Lys Asn Ile Leu Met Asp Thr Lys Asp Ser Ile
 980 985 990
 Cys Ala Gly Ala Thr Gly Ala Ile Thr Val Val Lys Gly Ala Ala Gln
 995 1000 1005
 Gly Gly Leu Asp Thr Ser Asn Ala Ala Leu Thr Gly Thr Met Asp Thr
 1010 1015 1020
 Ala Lys Gly Thr Val Gln Thr Ser Leu Asp Thr Ser Lys His Met Leu
 1025 1030 1035 1040
 Ile Gly Met Lys Asp Thr Val Cys Ala Gly Val Thr Ser Ala Met Asn
 1045 1050 1055
 Met Ala Lys Gly Ile His Lys Asn Thr Asp Thr Thr Arg Asp Thr Gln
 1060 1065 1070
 Ser Ser Val Leu Ala His Ser Gly Asn Val Ala Thr Asn Ala Ile His
 1075 1080 1085
 Thr Gly Val His Thr Val Pro Ser Ser Leu Ser Gly Ser His Ser Ile
 1090 1095 1100
 Ile Cys His Glu Pro Ser Ile Tyr Arg Ala Thr Asn His Gly Val Gly
 1105 1110 1115 1120
 His Ala Ile Leu Thr Ser Thr Glu Ser Leu Cys Cys Glu Thr Ser Ser
 1125 1130 1135
 Phe Ser Asp Lys Tyr Gly Leu Gly His Val Thr Glu Pro Arg Ala Asp
 1140 1145 1150
 Thr Lys Thr Leu Val Ser Gly Met Ala Ser Ser Ala Cys Ala Ala Thr
 1155 1160 1165

Arg Ser Val Glu Glu Cys Gly Gln Leu Ala Ala Thr Gly Phe Ala Ala
1170 1175 1180

Leu Pro Asp Glu Leu Lys Gly Leu Gly Asp Ile Phe Gln Pro Met Thr
1185 1190 1195 1200

Thr Glu Glu Gln Ala Gln Leu Ala Val Ser Glu Ser Gly Pro Arg Val
1205 1210 1215

Leu Ser Ala Asp Arg Gly Ser Tyr Tyr Ile Arg Leu Gly Asp Leu Ala
1220 1225 1230

Pro Ser Phe Arg Gln Arg Ala Phe Glu His Ala Leu Ser His Ile Gln
1235 1240 1245

His Asn Gln Phe Gln Ala Arg Ala Ala Val Ala Gln Leu Gln Glu Ala
1250 1255 1260

Phe Gln Met Thr Asp Met Thr Met Glu Ala Ala Cys Gly Lys Leu Cys
1265 1270 1275 1280

Ser Asp Gln Ser Leu Asn Thr Met Val Glu Ala Val Gly Ser His Glu
1285 1290 1295

Met Arg Ala Ser Val Ala Gln Asp Arg Leu Cys Thr Leu Ala His Gln
1300 1305 1310

Leu His Ala Ala Tyr Ser Ser Leu Val Thr Ser Leu Gln Gly Leu Pro
1315 1320 1325

Glu Val Gln Gln Gln Ala Gly Gln Ala Arg His Ser Leu Cys Lys Leu
1330 1335 1340

Tyr Gly Leu Val Ser Ser Glu Ala Gly Ser Glu Leu Gln Thr Glu Gln
1345 1350 1355 1360

Leu Ala Gln Ser Ser Ala Gly Val Val Glu Ala Trp Gln Gly Leu Glu
1365 1370 1375

Val Leu Leu Glu Lys Leu Gln Gln Asn Pro Pro Leu Ser Trp Leu Val
1380 1385 1390

Gly Pro Phe Thr Ser Met Pro Cys Gly Gln Leu
1395 1400

<210> 235

<211> 75

<212> PRT

<213> Homo sapiens

<400> 235

Glu Lys Ala Lys Glu Thr Ala Asp Ser Ala Lys Glu Lys Ala Ser Glu
1 5 10 15

Ala Lys Asp Ala Ala Lys Asp Lys Ala Glu Glu Ala Lys Asp Ala Ala

20

25

30

Lys Glu Lys Ala Glu Glu Ala Lys Asp Lys Ala Lys Glu Lys Lys Ala
 35 40 45

Gly Glu Ala Lys Asp Lys Thr Gly Asn Lys Ala Lys Glu Lys Ala Glu
 50 55 60

Glu Ala Lys Asp Lys Ala Ser Asp Ala Lys Asp
 65 70 75

<210> 236

<211> 75

<212> PRT

<213> Homo sapiens

<400> 236

Glu Lys Ala Lys Glu Thr Ala Asp Ser Ala Lys Glu Lys Ala Ser Glu
 1 5 10 15

Ala Lys Asp Ala Ala Lys Asp Lys Ala Glu Glu Ala Lys Asp Ala Ala
 20 25 30

Lys Glu Lys Ala Glu Glu Ala Lys Asp Lys Ala Lys Glu Lys Lys Ala
 35 40 45

Gly Glu Ala Lys Asp Lys Thr Gly Asn Lys Ala Lys Glu Lys Ala Glu
 50 55 60

Glu Ala Lys Asp Lys Ala Ser Asp Ala Lys Asp
 65 70 75

<210> 237

<211> 75

<212> PRT

<213> Homo sapiens

<400> 237

Glu Lys Ala Lys Glu Thr Ala Asp Ser Ala Lys Glu Lys Ala Ser Glu
 1 5 10 15

Ala Lys Asp Ala Ala Lys Asp Lys Ala Glu Glu Ala Lys Asp Ala Ala
 20 25 30

Lys Glu Lys Ala Glu Glu Ala Lys Asp Lys Ala Lys Glu Lys Lys Ala
 35 40 45

Gly Glu Ala Lys Asp Lys Thr Gly Asn Lys Ala Lys Glu Lys Ala Glu
 50 55 60

Glu Ala Lys Asp Lys Ala Ser Asp Ala Lys Asp
 65 70 75

<210> 238

<211> 75

<212> PRT

<213> Homo sapiens

<400> 238

Glu Lys Ala Lys Glu Thr Ala Asp Ser Ala Lys Glu Lys Ala Ser Glu
1 5 10 15

Ala Lys Asp Ala Ala Lys Asp Lys Ala Glu Glu Ala Lys Asp Ala Ala
20 25 30

Lys Glu Lys Ala Glu Glu Ala Lys Asp Lys Ala Lys Glu Lys Lys Ala
35 40 45

Gly Glu Ala Lys Asp Lys Thr Gly Asn Lys Ala Lys Glu Lys Ala Glu
50 55 60

Glu Ala Lys Asp Lys Ala Ser Asp Ala Lys Asp
65 70 75

<210> 239

<211> 411

<212> PRT

<213> Homo sapiens

<400> 239

Met Ala Thr Ala Val Glu Asp Leu Pro Gln Gln Glu Ser Val Val Asp
1 5 10 15

Arg Val Ala Ser Leu Pro Leu Val Ser Ser Thr Ile Lys Cys Asp Leu
20 25 30

Val Ser Ala Ala Tyr Asp Ser Thr Lys Glu Asn Tyr Pro Leu Val Lys
35 40 45

Gly Val Lys Ser Val Cys Glu Ala Ala Glu Lys Gly Val Glu Thr Ile
50 55 60

Thr Ser Ala Ala Val Thr Ser Ala Gln Pro Ile Val Lys Lys Leu Glu
65 70 75 80

Pro Gln Ile Ala Val Ala Asn Glu Tyr Ala Cys Lys Gly Leu Asp Lys
85 90 95

Leu Glu Glu Lys Leu Pro Ile Leu Gln Gln Pro Pro Glu Lys Ile Val
100 105 110

Ala Asn Ala Lys Gly Ala Val Thr Gly Ala Lys Asp Ala Val Ser Thr
115 120 125

Arg Val Glu Ser Ala Lys Asp Ser Val Val Gln Pro Ile Leu Glu Arg
130 135 140

Val Asp Lys Val Lys Gly Ala Val Gln Ala Gly Val Glu Ser Thr Lys
145 150 155 160

Ser Val Val Thr Gly Ser Ala Asn Thr Val Leu Gly Ser Arg Val Gly
 165 170 175
 Gln Leu Ala Ser Ser Gly Val Asp Thr Ala Leu Gly Lys Ser Glu Lys
 180 185 190
 Leu Val Glu Gln Tyr Leu Pro Pro Thr Glu Glu Glu Leu Glu Lys Glu
 195 200 205
 Ala Lys Lys Val Glu Gly Phe Asp Ser Lys Lys Val Gln Gln Gln Arg
 210 215 220
 Gln Lys Pro Ser Ala Leu Val Arg Leu Gly Ser Leu Ser Glu Lys Leu
 225 230 235 240
 Arg Arg Arg Ala Tyr Gln Gln Ala Leu Gly Arg Val Arg Ala Ala Lys
 245 250 255
 Gln Arg Ser Gln Glu Ala Ile His Gln Leu Gln Ser Val Ala Glu Leu
 260 265 270
 Ile Glu Thr Ala Lys Lys Gly Val Ser Gln Ala Asn Gln Lys Val Ser
 275 280 285
 Arg Ala Gln Asp Lys Leu Tyr Val Leu Trp Leu Glu Trp Lys Ala Ser
 290 295 300
 Ser Gly Glu Asp Pro Glu Asp Glu Ser Asp Thr Glu Pro Glu Gln Ile
 305 310 315 320
 Glu Ser Arg Ile Leu Leu Leu Thr Arg Glu Leu Ala Gln Gln Leu Val
 325 330 335
 Ala Ala Leu Lys Thr Leu Leu Ser Ser Ile Gln Gly Ile Pro Gln Asn
 340 345 350
 Leu Gln Asp Thr Val Gln Gln Val Gly Ser Met Ser Gly Asp Ala Tyr
 355 360 365
 Ser Ala Phe Arg Ser Arg Ala Ala Ser Phe Lys Glu Thr Ser Asp Gly
 370 375 380
 Leu Leu Thr Ser Ser Lys Gly Arg Val Ala Ser Leu Lys Glu Ala Leu
 385 390 395 400
 Asp Glu Val Met Asp Tyr Val Val Ser Asn Thr
 405 410

<210> 240

<211> 1348

<212> PRT

<213> Homo sapiens

<400> 240

Gly Ala Lys Asp Leu Val Cys Ser Lys Met Ser Arg Ala Lys Asp Ala
 1 5 10 15

Val Ser Ser Gly Val Ala Ser Val Val Asp Val Ala Lys Gly Val Val
 20 25 30
 Gln Gly Gly Leu Asp Thr Thr Arg Ser Ala Leu Thr Gly Thr Lys Glu
 35 40 45
 Ala Val Ser Ser Glv Val Thr Gly Ala Met Asp Met Ala Lys Gly Ala
 50 55 60
 Val Gln Gly Gly Leu Asp Thr Ser Lys Ala Val Leu Thr Gly Thr Lys
 65 70 75 80
 Asp Thr Val Ser Thr Gly Leu Thr Gly Ala Val Asn Val Ala Lys Gly
 85 90 95
 Thr Val Gln Ala Gly Val Asp Thr Thr Lys Thr Val Leu Thr Gly Thr
 100 105 110
 Lys Asp Thr Val Thr Thr Gly Val Met Gly Ala Val Asn Leu Ala Lys
 115 120 125
 Gly Thr Val Gln Thr Gly Val Glu Thr Ser Lys Ala Val Leu Thr Gly
 130 135 140
 Thr Lys Asp Ala Val Ser Thr Gly Leu Thr Gly Ala Val Asn Val Ala
 145 150 155 160
 Arg Gly Ser Ile Gln Thr Gly Val Asp Thr Ser Lys Thr Val Leu Thr
 165 170 175
 Gly Thr Lys Asp Thr Val Cys Ser Gly Val Thr Ser Ala Met Asn Val
 180 185 190
 Ala Lys Gly Thr Ile Gln Thr Gly Val Asp Thr Ser Lys Thr Val Leu
 195 200 205
 Thr Gly Thr Lys Asp Thr Val Cys Ser Gly Val Thr Gly Ala Met Asn
 210 215 220
 Val Ala Lys Gly Thr Ile Gln Thr Gly Val Asp Thr Ser Lys Thr Val
 225 230 235 240
 Leu Thr Gly Thr Lys Asp Thr Val Cys Ser Gly Val Thr Gly Ala Met
 245 250 255
 Asn Val Ala Lys Gly Thr Ile Gln Thr Gly Val Asp Thr Thr Lys Thr
 260 265 270
 Val Leu Thr Gly Thr Lys Asn Thr Val Cys Ser Gly Val Thr Gly Ala
 275 280 285
 Val Asn Leu Ala Lys Glu Ala Ile Gln Gly Gly Leu Asp Thr Thr Lys
 290 295 300
 Ser Met Val Met Gly Thr Lys Asp Thr Met Ser Thr Gly Leu Thr Gly
 305 310 315 320

Ala Ala Asn Val Ala Lys Gly Ala Met Gln Thr Gly Leu Asn Thr Thr
 325 330 335
 Gln Asn Ile Ala Thr Gly Thr Lys Asp Thr Val Cys Ser Gly Val Thr
 340 345 350
 Gly Ala Met Asn Leu Ala Arg Gly Thr Ile Gln Thr Gly Val Asp Thr
 355 360 365
 Thr Lys Ile Val Leu Thr Gly Thr Lys Asp Thr Val Cys Ser Gly Val
 370 375 380
 Thr Gly Ala Ala Asn Val Ala Lys Gly Ala Val Gln Gly Gly Leu Asp
 385 390 395 400
 Thr Thr Lys Ser Val Leu Thr Gly Thr Lys Asp Ala Val Ser Thr Gly
 405 410 415
 Leu Thr Gly Ala Val Asn Val Ala Lys Gly Thr Val Gln Thr Gly Val
 420 425 430
 Asp Thr Thr Lys Thr Val Leu Thr Gly Thr Lys Asp Thr Val Cys Ser
 435 440 445
 Gly Val Thr Ser Ala Val Asn Val Ala Lys Gly Ala Val Gln Gly Gly
 450 455 460
 Leu Asp Thr Thr Lys Ser Val Val Ile Gly Thr Lys Asp Thr Met Ser
 465 470 475 480
 Thr Gly Leu Thr Gly Ala Ala Asn Val Ala Lys Gly Ala Val Gln Thr
 485 490 495
 Gly Val Asp Thr Ala Lys Thr Val Leu Thr Gly Thr Lys Asp Thr Val
 500 505 510
 Thr Thr Gly Leu Val Gly Ala Val Asn Val Ala Lys Gly Thr Val Gln
 515 520 525
 Thr Gly Met Asp Thr Thr Lys Thr Val Leu Thr Gly Thr Lys Asp Thr
 530 535 540
 Ile Tyr Ser Gly Val Thr Ser Ala Val Asn Val Ala Lys Gly Ala Val
 545 550 555 560
 Gln Thr Gly Leu Lys Thr Thr Gln Asn Ile Ala Thr Gly Thr Lys Asn
 565 570 575
 Thr Phe Gly Ser Gly Val Thr Gly Ala Val Asn Val Ala Lys Gly Ala
 580 585 590
 Val Gln Thr Gly Val Asp Thr Ala Lys Thr Val Leu Thr Gly Thr Lys
 595 600 605
 Asp Thr Val Thr Thr Gly Leu Met Gly Ala Val Asn Val Ala Lys Gly
 610 615 620

Thr Val Gln Thr Ser Val Asp Thr Thr Lys Thr Val Leu Thr Gly Thr
 625 630 635 640
 Lys Asp Thr Val Cys Ser Gly Val Thr Gly Ala Ala Asn Val Ala Lys
 645 650 655
 Glv Ala Val Gln Thr Glv Val Aso Thr Ala Lys Thr Val Leu Thr Gly
 660 665 670
 Thr Lys Asp Thr Val Cys Ser Gly Val Thr Gly Ala Val Asn Val Ala
 675 680 685
 Lys Gly Ala Val Gln Thr Gly Leu Lys Thr Thr Gln Asn Ile Ala Thr
 690 695 700
 Gly Thr Lys Asn Thr Leu Gly Ser Gly Val Thr Gly Ala Ala Asn Val
 705 710 715 720
 Ala Lys Gly Ala Val Gln Gly Gly Leu Asp Thr Thr Lys Ser Val Leu
 725 730 735
 Thr Gly Thr Lys Asp Ala Val Ser Thr Gly Leu Thr Gly Ala Val Asn
 740 745 750
 Leu Ala Lys Gly Thr Val Gln Thr Gly Met Asp Thr Thr Lys Thr Val
 755 760 765
 Leu Thr Gly Thr Lys Asp Ala Val Cys Ser Gly Val Thr Gly Ala Ala
 770 775 780
 Asn Val Ala Lys Gly Ala Val Gln Thr Gly Val Asp Thr Ala Lys Thr
 785 790 795 800
 Val Leu Thr Gly Thr Lys Asp Thr Val Thr Thr Gly Leu Met Gly Ala
 805 810 815
 Val Asn Val Ala Lys Gly Thr Val Gln Thr Ser Val Asp Thr Thr Lys
 820 825 830
 Thr Val Leu Thr Gly Thr Lys Asp Thr Val Cys Ser Gly Val Thr Gly
 835 840 845
 Ala Ala Asn Val Ala Lys Gly Ala Val Gln Gly Gly Leu Asp Thr Thr
 850 855 860
 Lys Ser Val Leu Thr Gly Thr Lys Asp Thr Val Ser Thr Gly Leu Thr
 865 870 875 880
 Gly Ala Val Asn Leu Ala Lys Gly Thr Val Gln Thr Gly Val Asp Thr
 885 890 895
 Ser Lys Thr Val Leu Thr Gly Thr Lys Asp Thr Val Cys Ser Gly Val
 900 905 910
 Thr Gly Ala Val Asn Val Ala Lys Gly Thr Val Gln Thr Gly Val Asp
 915 920 925

Thr Ala Lys Thr Val Leu Ser Gly Ala Lys Asp Ala Val Thr Thr Gly
 930 935 940
 Val Thr Gly Ala Val Asn Val Ala Lys Gly Thr Val Gln Thr Gly Val
 945 950 955 960
 Asp Ala Ser Lys Ala Val Leu Met Gly Thr Lys Asp Thr Val Phe Ser
 965 970 975
 Gly Val Thr Gly Ala Met Ser Met Ala Lys Gly Ala Val Gln Gly Gly
 980 985 990
 Leu Asp Thr Thr Lys Thr Val Leu Thr Gly Thr Lys Asp Ala Val Ser
 995 1000 1005
 Ala Gly Leu Met Gly Ser Gly Asn Val Ala Thr Gly Ala Thr His Thr
 1010 1015 1020
 Gly Leu Ser Thr Phe Gln Asn Trp Leu Pro Ser Thr Pro Ala Thr Ser
 1025 1030 1035 1040
 Trp Gly Gly Leu Thr Ser Ser Arg Thr Thr Asp Asn Gly Gly Glu Gln
 1045 1050 1055
 Thr Ala Leu Ser Pro Gln Glu Ala Pro Phe Ser Gly Ile Ser Thr Pro
 1060 1065 1070
 Pro Asp Val Leu Ser Val Gly Pro Glu Pro Ala Trp Glu Ala Ala Ala
 1075 1080 1085
 Thr Thr Lys Gly Leu Ala Thr Asp Val Ala Thr Phe Thr Gln Gly Ala
 1090 1095 1100
 Ala Pro Gly Arg Glu Asp Thr Gly Leu Leu Thr Thr Thr His Gly Pro
 1105 1110 1115 1120
 Glu Glu Ala Pro Arg Leu Ala Met Leu Gln Asn Glu Leu Glu Gly Leu
 1125 1130 1135
 Gly Asp Ile Phe His Pro Met Asn Ala Glu Glu Gln Ala Gln Leu Ala
 1140 1145 1150
 Ala Ser Gln Pro Gly Pro Lys Val Leu Ser Ala Glu Gln Gly Ser Tyr
 1155 1160 1165
 Phe Val Arg Leu Gly Asp Leu Gly Pro Ser Phe Arg Gln Arg Ala Phe
 1170 1175 1180
 Glu His Ala Val Ser His Leu Gln His Gly Gln Phe Gln Ala Arg Asp
 1185 1190 1195 1200
 Thr Leu Ala Gln Leu Gln Asp Cys Phe Arg Leu Ile Glu Lys Ala Gln
 1205 1210 1215
 Gln Ala Pro Glu Gly Gln Pro Arg Leu Asp Gln Gly Ser Gly Ala Ser
 1220 1225 1230

Ala Glu Asp Ala Ala Val Gln Glu Glu Arg Asp Ala Gly Val Leu Ser
1235 1240 1245

Arg Val Cys Gly Leu Leu Arg Gln Leu His Thr Ala Tyr Ser Gly Leu
1250 1255 1260

Val Ser Ser Leu Gln Gly Leu Pro Ala Glu Leu Gln Gln Pro Val Gly
1265 1270 1275 1280

Arg Ala Arg His Ser Leu Cys Glu Leu Tyr Gly Ile Val Ala Ser Ala
1285 1290 1295

Gly Ser Val Glu Glu Leu Pro Ala Glu Arg Leu Val Gln Ser Arg Glu
1300 1305 1310

Gly Val His Gln Ala Trp Gln Gly Leu Glu Gln Leu Leu Glu Gly Leu
1315 1320 1325

Gln His Asn Pro Pro Leu Ser Trp Leu Val Gly Pro Phe Ala Leu Pro
1330 1335 1340

Ala Gly Gly Gln
1345

<210> 241

<211> 1403

<212> PRT

<213> Mus musculus

<400> 241

Met Ser Ala Ser Gly Asp Gly Thr Arg Val Pro Pro Lys Ser Lys Gly
1 5 10 15

Lys Thr Leu Ser Ser Phe Phe Gly Ser Leu Pro Gly Phe Ser Ser Ala
20 25 30

Arg Asn Leu Val Ser His Thr His Ser Ser Thr Ser Thr Lys Asp Leu
35 40 45

Gln Thr Ala Thr Asp Pro Ser Gly Thr Pro Ala Pro Ser Ser Lys Val
50 55 60

Ser Thr Asn Ser Gln Met Ala Gly Asp Ala Ala Gly Leu Leu Gln Pro
65 70 75 80

Ser Glu Gln Thr Ala Gly Asp Lys Asp Met Gly Ser Phe Ser Val Thr
85 90 95

Ser Ser Glu Asp Ala Phe Ser Gly Val Phe Gly Ile Met Asp Ala Ala
100 105 110

Lys Gly Met Val Gln Gly Gly Leu Gly Ala Thr Gln Ser Ala Leu Val
115 120 125

Gly Thr Lys Glu Ala Val Ser Gly Gly Val Met Gly Ala Val Gly Val

130	135	140
Ala Lys Gly Leu Val	Lys Gly Gly Leu Asp Thr	Ser Lys Asn Val Leu
145	150	155 160
Thr Asn Thr Lys Asp Thr Val Thr Thr Gly Val Met Gly Ala Ala Asn		
	165	170 175
Met Ala Lys Gly Thr Val Gln Thr Gly Leu Asp Thr Thr Lys Ser Val		
	180	185 190
Val Met Gly Thr Lys Asp Thr Val Ala Thr Gly Leu Ala Gly Ala Val		
	195	200 205
Asn Val Ala Lys Gly Thr Ile Gln Gly Gly Leu Asp Thr Thr Lys Ser		
	210	215 220
Val Val Met Gly Thr Lys Asp Thr Val Thr Thr Gly Leu Thr Gly Ala		
	225	230 235 240
Ala Asn Val Ala Lys Gly Val Val Gln Gly Gly Leu Asp Thr Thr Lys		
	245	250 255
Ser Val Val Met Gly Thr Lys Asp Thr Val Thr Thr Gly Leu Thr Gly		
	260	265 270
Ala Met Asn Val Ala Lys Gly Thr Ala Gln Met Gly Ile Asp Thr Ser		
	275	280 285
Lys Thr Val Leu Thr Gly Thr Lys Asp Thr Val Cys Ala Gly Ala Thr		
	290	295 300
Gly Ala Ile Asn Val Ala Lys Gly Ala Ala Gln Gly Gly Leu Asp Thr		
	305	310 315 320
Thr Lys Ser Val Leu Ile Gly Thr Lys Asp Thr Val Thr Thr Gly Leu		
	325	330 335
Thr Gly Ala Val Asn Val Ala Lys Gly Ala Val Gln Gly Gly Leu Asp		
	340	345 350
Thr Thr Lys Ser Val Val Met Gly Thr Lys Asp Thr Val Thr Thr Gly		
	355	360 365
Leu Thr Gly Ala Met Asn Val Ala Lys Gly Thr Ala Gln Met Gly Leu		
	370	375 380
Gly Thr Ser Lys Thr Val Leu Thr Gly Thr Lys Asp Thr Val Cys Ala		
	385	390 395 400
Gly Leu Thr Gly Ala Ile Asn Val Ala Lys Gly Ala Ala Gln Gly Gly		
	405	410 415
Leu Asp Thr Thr Lys Ser Val Leu Met Gly Thr Lys Asp Thr Val Thr		
	420	425 430
Thr Gly Leu Thr Gly Ala Val Asn Val Ala Lys Gly Thr Ile Gln Gly		

435	440	445
Gly Leu Asp Thr Thr Lys Ser Val Val Met Gly Thr Lys Asp Thr Val		
450	455	460
Thr Thr Gly Leu Thr Gly Ala Val Asn Val Ala Lys Gly Thr Ile Gln		
465	470	480
Gly Gly Leu Asp Thr Thr Lys Ser Val Val Met Gly Thr Lys Asp Thr		
485	490	495
Val Thr Thr Gly Leu Thr Gly Ala Val Asn Val Ala Lys Gly Ala Ala		
500	505	510
Gln Gly Gly Leu Asp Thr Thr Lys Ser Val Val Met Gly Thr Lys Asp		
515	520	525
Thr Val Thr Thr Gly Leu Thr Gly Ala Met Asn Val Ala Lys Gly Thr		
530	535	540
Ala Gln Met Gly Leu Gly Thr Ser Lys Thr Val Leu Thr Gly Thr Lys		
545	550	555
Asp Thr Val Cys Ala Gly Leu Thr Gly Ala Ile Asn Val Ala Lys Gly		
565	570	575
Ala Ala Gln Gly Gly Leu Asp Thr Thr Lys Ser Val Leu Met Gly Thr		
580	585	590
Lys Asp Thr Val Thr Thr Gly Leu Thr Gly Ala Val Asn Val Ala Lys		
595	600	605
Gly Thr Ile Gln Gly Gly Leu Asp Thr Thr Lys Ser Val Val Met Gly		
610	615	620
Thr Lys Asp Thr Val Thr Thr Gly Leu Thr Gly Ala Val Asn Val Ala		
625	630	635
Lys Gly Ala Val Gln Gly Gly Leu Asp Thr Thr Lys Ser Val Val Met		
645	650	655
Gly Thr Lys Asp Thr Val Thr Thr Gly Leu Thr Gly Ala Leu Asn Val		
660	665	670
Ala Lys Gly Thr Ala Gln Met Gly Ile Asp Thr Ser Lys Thr Val Leu		
675	680	685
Ile Gly Thr Lys Asp Thr Val Cys Ala Gly Ala Thr Gly Ala Ile Asn		
690	695	700
Met Ala Lys Gly Ala Ala Gln Gly Gly Leu Asp Thr Thr Lys Ser Val		
705	710	715
Leu Met Gly Thr Lys Asp Thr Val Thr Thr Gly Leu Thr Gly Ala Ile		
725	730	735
Asn Val Ala Lys Gly Ser Ala Gln Gly Gly Leu Asp Thr Thr Lys Ser		

740								745				750					
Val	Leu	Ile	Gly	Thr	Lys	Asp	Thr	Val	Thr	Thr	Gly	Leu	Thr	Gly	Ala		
755								760			765						
Leu	Asn	Val	Ala	Lys	Gly	Thr	Val	Gln	Thr	Gly	Leu	Asp	Thr	Ser	Gln		
770								775			780						
Arg	Val	Leu	Thr	Gly	Thr	Lys	Asp	Asn	Val	Tyr	Ala	Gly	Val	Thr	Gly		
785								790			795			800			
Ala	Val	Asn	Val	Ala	Lys	Gly	Thr	Ile	Gln	Gly	Gly	Leu	Asp	Thr	Thr		
			805					810						815			
Lys	Ser	Val	Val	Met	Gly	Thr	Lys	Asp	Thr	Val	Thr	Thr	Gly	Leu	Thr		
			820					825						830			
Gly	Ala	Val	Asn	Val	Ala	Lys	Gly	Ala	Val	Gln	Gly	Gly	Leu	Asp	Thr		
835								840			845						
Thr	Lys	Ser	Val	Val	Met	Gly	Thr	Lys	Asp	Thr	Val	Thr	Thr	Gly	Leu		
850								855			860						
Thr	Gly	Ala	Met	Asn	Val	Ala	Lys	Gly	Thr	Ala	Gln	Met	Gly	Ile	Asp		
865			870								875			880			
Thr	Ser	Lys	Thr	Val	Leu	Thr	Gly	Thr	Lys	Asp	Thr	Val	Cys	Ala	Gly		
			885					890						895			
Leu	Thr	Gly	Ala	Ile	Asn	Val	Ala	Lys	Gly	Ala	Thr	Gln	Gly	Gly	Leu		
			900					905						910			
Asp	Thr	Thr	Lys	Ser	Val	Leu	Met	Gly	Thr	Lys	Asp	Thr	Val	Thr	Thr		
915								920			925						
Gly	Leu	Thr	Gly	Ala	Ile	Asn	Val	Ala	Lys	Gly	Ala	Ala	Gln	Gly	Gly		
930								935			940						
Leu	Asp	Thr	Thr	Lys	Ser	Val	Leu	Leu	Gly	Thr	Lys	Asp	Thr	Val	Thr		
945			950								955			960			
Thr	Gly	Leu	Thr	Gly	Ala	Ala	Asn	Val	Ala	Lys	Glu	Thr	Val	Gln	Met		
			965					970						975			
Gly	Leu	Asp	Thr	Ser	Lys	Asn	Ile	Leu	Met	Asp	Thr	Lys	Asp	Ser	Ile		
			980					985						990			
Cys	Ala	Gly	Ala	Thr	Gly	Ala	Ile	Thr	Val	Val	Lys	Gly	Ala	Ala	Gln		
995								1000			1005						
Gly	Gly	Leu	Asp	Thr	Ser	Asn	Ala	Ala	Leu	Thr	Gly	Thr	Met	Asp	Thr		
1010								1015			1020						
Ala	Lys	Gly	Thr	Val	Gln	Thr	Ser	Leu	Asp	Thr	Ser	Lys	His	Met	Leu		
1025			1030								1035			1040			
Ile	Gly	Met	Lys	Asp	Thr	Val	Cys	Ala	Gly	Val	Thr	Ser	Ala	Met	Asn		

1045

1050

1055

Met Ala Lys Gly Ile His Lys Asn Thr Asp Thr Thr Arg Asp Thr Gln
 1060 1065 1070

Ser Ser Val Leu Ala His Ser Gly Asn Val Ala Thr Asn Ala Ile His
 1075 1080 1085

Thr Gly Val His Thr Val Pro Ser Ser Leu Ser Gly Ser His Ser Ile
 1090 1095 1100

Ile Cys His Glu Pro Ser Ile Tyr Arg Ala Thr Asn His Gly Val Gly
 1105 1110 1115 1120

His Ala Ile Leu Thr Ser Thr Glu Ser Leu Cys Cys Glu Thr Ser Ser
 1125 1130 1135

Phe Ser Asp Lys Tyr Gly Leu Gly His Val Thr Glu Pro Arg Ala Asp
 1140 1145 1150

Thr Lys Thr Leu Val Ser Gly Met Ala Ser Ser Ala Cys Ala Ala Thr
 1155 1160 1165

Arg Ser Val Glu Glu Cys Gly Gln Leu Ala Ala Thr Gly Phe Ala Ala
 1170 1175 1180

Leu Pro Asp Glu Leu Lys Gly Leu Gly Asp Ile Phe Gln Pro Met Thr
 1185 1190 1195 1200

Thr Glu Glu Gln Ala Gln Leu Ala Val Ser Glu Ser Gly Pro Arg Val
 1205 1210 1215

Leu Ser Ala Asp Arg Gly Ser Tyr Tyr Ile Arg Leu Gly Asp Leu Ala
 1220 1225 1230

Pro Ser Phe Arg Gln Arg Ala Phe Glu His Ala Leu Ser His Ile Gln
 1235 1240 1245

His Asn Gln Phe Gln Ala Arg Ala Ala Val Ala Gln Leu Gln Glu Ala
 1250 1255 1260

Phe Gln Met Thr Asp Met Thr Met Glu Ala Ala Cys Gly Lys Leu Cys
 1265 1270 1275 1280

Ser Asp Gln Ser Leu Asn Thr Met Val Glu Ala Val Gly Ser His Glu
 1285 1290 1295

Met Arg Ala Ser Val Ala Gln Asp Arg Leu Cys Thr Leu Ala His Gln
 1300 1305 1310

Leu His Ala Ala Tyr Ser Ser Leu Val Thr Ser Leu Gln Gly Leu Pro
 1315 1320 1325

Glu Val Gln Gln Gln Ala Gly Gln Ala Arg His Ser Leu Cys Lys Leu
 1330 1335 1340

Tyr Gly Leu Val Ser Ser Glu Ala Gly Ser Glu Leu Gln Thr Glu Gln

1345

1350

1355

1360

Leu Ala Gln Ser Ser Ala Gly Val Val Glu Ala Trp Gln Gly Leu Glu
 1365 1370 1375

Val Leu Leu Glu Lys Leu Gln Gln Asn Pro Pro Leu Ser Trp Leu Val
 1380 1385 1390

Gly Pro Phe Thr Ser Met Pro Cys Gly Gln Leu
 1395 1400

<210> 242

<211> 28

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: chemically synthesized

<400> 242

gtaaaattgga agagtttgtt caagggaa

28

<210> 243

<211> 29

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: chemically synthesized

<400> 243

cttggaatc catctttcat taagtgagc

29

<210> 244

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: chemically synthesized

<400> 244

ctatctgccg attttcattg tggacag

27

<210> 245

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: chemically synthesized

<400> 245

ttcgaattaa ggttccaagg ctatgag

27

<210> 246

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: chemically synthesized

<400> 246

cgggaagact cggcagcac

19

<210> 247

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: chemically synthesized

<400> 247

aaagcctttt atgggtcttt gaatttattg

30

<210> 248

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: chemically synthesized

<400> 248

tgctgagggt gcatttatgt ttcag

25

<210> 249

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: chemically synthesized

<400> 249

ccacacgtgg ataataaaga gttgac

26

<210> 250
<211> 19
<212> DNA
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<220>
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synthesized

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gcggcggcca tgggaqata

19

<210> 251
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
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synthesized

<400> 251
aggaagggga agcgctctca gtattc

26

<210> 252
<211> 19
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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: chemically
synthesized

<400> 252
gcggcggcca tgggagata

19

<210> 253
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: chemically
synthesized

<400> 253
aggaagggga agcgctctca gtattc

26

<210> 254
<211> 24
<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: chemically synthesized

<400> 254

agcacgcact tgcaccaaac tacc

24

<210> 255

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: chemically synthesized

<400> 255

cctatggctg aaggcggagg t

21

<210> 256

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: chemically synthesized

<400> 256

ctgggtctcc cctccac

18

<210> 257

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: chemically synthesized

<400> 257

gtttattctg agcaccggga a

21

<210> 258

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: chemically synthesized

<400> 258
aggcctgcag gtgggtgtc

19

<210> 259
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: chemically
synthesized

<400> 259
ctgcaggctc ctacagctac tgcc

24

<210> 260
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: chemically
synthesized

<400> 260
tcctgagggtg tggatgaata ct

22

<210> 261
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: chemically
synthesized

<400> 261
catcatctac aatggctacc ccagtga

27

<210> 262
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: chemically
synthesized

<400> 262
ccatcttctag tggtagcttc at

22

<210> 263
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: chemically
 synthesized

 <400> 263
 gaaacagtcg gggaaaract 20

 <210> 264
 <211> 27
 <212> DNA
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 <220>
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 <400> 264
 tggtaagaa gacacaaac actctca 27

 <210> 265
 <211> 20
 <212> DNA
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 <220>
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 <400> 265
 aaaccaaagg cccagaattt 20

 <210> 266
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
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 synthesized

 <400> 266
 ggggaaatga cgctgataat at 22

 <210> 267
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<220>
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 <400> 267
 cccctatata tqacctgact gccatg 26

 <210> 268
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 <220>
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 <400> 268
 cccaaatagc aqtaqqcact tt 22

 <210> 269
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 <220>
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 <400> 269
 gaaacagtcg gggaaacact 20

 <210> 270
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 <400> 270
 tggtaagaa gacacaaaac actctca 27

 <210> 271
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 <400> 271

aaaccaaagg ccagaattt

20

<210> 272

<211> 22

<212> DNA

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<220>

<223> Description of Artificial Sequence: chemically synthesized

<400> 272

tectgaggtg tggatgaata ct

22

<210> 273

<211> 27

<212> DNA

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<220>

<223> Description of Artificial Sequence: chemically synthesized

<400> 273

catcatctac aatggctacc ccagtga

21

<210> 274

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: chemically synthesized

<400> 274

ccatcttcag tggtgacttc at

22

<210> 275

<211> 22

<212> DNA

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<220>

<223> Description of Artificial Sequence: chemically synthesized

<400> 275

gggqaaatga cgctgataat at

22

<210> 276

<211> 20

<212> DNA
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 <220>
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 <400> 276
 ccccatata tgaactgact gccatg 26

 <210> 277
 <211> 22
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 <220>
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 <400> 277
 cccaaatagc agtaggcact tt 22

 <210> 278
 <211> 21
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 <220>
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 <400> 278
 tcactgctat gtgcacatca a 21

 <210> 279
 <211> 25
 <212> DNA
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 <220>
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 <400> 279
 catcacagat gccaacactc atcgg 25

 <210> 280
 <211> 22
 <212> DNA
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 <220>
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synthesized

<400> 280
actgagtagt gggcactttg aa 22

<210> 281
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
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synthesized

<400> 281
agccacatgt cttgatcta ca 22

<210> 282
<211> 26
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<220>
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synthesized

<400> 282
acaacatggt ctgtgctggc ttccat 26

<210> 283
<211> 22
<212> DNA
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<220>
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synthesized

<400> 283
ccactatct ccttgacatg aa 22

<210> 284
<211> 20
<212> DNA
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<220>
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synthesized

<400> 284
ccatttcagc ttacagaga 20

<210> 285
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
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synthesized

<400> 285
cagatcctcg cattctctca gaaqctg

27

<210> 286
<211> 22
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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: chemically
synthesized

<400> 286
atgctcactg tctgttcctt gt

22

<210> 287
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: chemically
synthesized

<400> 287
ctttccactg ctctgcaaag

20

<210> 288
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: chemically
synthesized

<400> 288
aaccagctg tcaccagta caggtg

26

<210> 289
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: chemically synthesized

 <400> 289
 gtccgtgaca cctctcaga tg 22

 <210> 290
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: chemically synthesized

 <400> 290
 accaatggat ccactcctat ct 22

 <210> 291
 <211> 26
 <212> DNA
 <213> Artificial Sequence

 <220>
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 <400> 291
 ctgactccaa ccaggacagc aagatg 26

 <210> 292
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: chemically synthesized

 <400> 292
 attctcagca ggctcttgat ct 22

 <210> 293
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: chemically synthesized

<400> 293
ttgagttgac tccagaggac at 22

<210> 294
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
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synthesized

<400> 294
attgatggcc tcaacagaaa tctccg 26

<210> 295
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
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synthesized

<400> 295
ccagcaagac tgaagaaaga aa 22

<210> 296
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
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synthesized

<400> 296
tctatggtca tgggtacgaa ag 22

<210> 297
<211> 24
<212> DNA
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<220>
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synthesized

<400> 297
acacgatgtc cactgggctc acag 24

<210> 298

<211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
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 synthesized

 <400> 298
 attatattca acccaattta 20

 <210> 299
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: chemically
 synthesized

 <400> 299
 gacctgatag acaaccctgt ga 22

 <210> 300
 <211> 26
 <212> DNA
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 <220>
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 synthesized

 <400> 300
 acggcaagtc tctgctcag attttg 26

 <210> 301
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
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 <400> 301
 atcacattcc tctggatttg aa 22

 <210> 302
 <211> 22
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<223> Description of Artificial Sequence: chemically synthesized

<400> 302

ggtaggtact gtcggtgaat tg

22

<210> 303

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: chemically synthesized

<400> 303

cttcatcaaa tgaaaataat ttcgagcaag

30

<210> 304

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: chemically synthesized

<400> 304

gcaatgcgag cttcttcag

19

<210> 305

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: chemically synthesized

<400> 305

agggactaca gcctccagat ac

22

<210> 306

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: chemically synthesized

<400> 306

atggccata cacgtgttct gttcag

26

<210> 307
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: chemically synthesized

<400> 307
cattqttctg gqtqtatqtt ga

22

<210> 308
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: chemically synthesized

<400> 308
gctgggtacct tgtgttgaca ct

22

<210> 309
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: chemically synthesized

<400> 309
ccagcctatt ctacctgaag aatgcc

27

<210> 310
<211> 22
<212> DNA
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<220>
<223> Description of Artificial Sequence: chemically synthesized

<400> 310
aaagcctttt atgggtcttt ga

22

<210> 311
<211> 22
<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: chemically synthesized

<400> 311

tctctttacag attccaqaga ct

22

<210> 312

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: chemically synthesized

<400> 312

tgtgccttcc agaacatctc ttgtgg

26

<210> 313

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: chemically synthesized

<400> 313

tgaacacaga agccaagtaq tg

22

<210> 314

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: chemically synthesized

<400> 314

ctactactgg tggctgcgaa t

21

<210> 315

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: chemically synthesized

<400> 315
cagatcatga cccacttgcc tggag

25

<210> 316
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: chemically
synthesized

<400> 316
actcttcagc ggatgtagat ca

22

<210> 317
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: chemically
synthesized

<400> 317
acctactcgg ccactaccta ga

22

<210> 318
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: chemically
synthesized

<400> 318
caccctatca agaagtgcctt ttaaattca

29

<210> 319
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: chemically
synthesized

<400> 319
cattgcattt ccagctacag ta

22

<210> 320
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: chemically
 synthesized

 <400> 320
 cacggaacgt atcttcaaga aa 22

 <210> 321
 <211> 26
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: chemically
 synthesized

 <400> 321
 ctgcacgtgt gaccctaact ggactg 26

 <210> 322
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: chemically
 synthesized

 <400> 322
 gccacagtcc acagaacata tt 22

 <210> 323
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: chemically
 synthesized

 <400> 323
 cagagaagca gacgagttca ct 22

 <210> 324
 <211> 26
 <212> DNA
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<220>
 <223> Description of Artificial Sequence: chemically synthesized

 <400> 324
 caaaqacaqa attttacct aaqaca 26

 <210> 325
 <211> 22
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 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: chemically synthesized

 <400> 325
 atttctggtt cacaaactcc ta 22

 <210> 326
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: chemically synthesized

 <400> 326
 ggcttcata attaccatca ca 22

 <210> 327
 <211> 27
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: chemically synthesized

 <400> 327
 cctttccctt tgactactct gcgagtg 27

 <210> 328
 <211> 21
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: chemically synthesized

 <400> 328

gcacatgaaa tcaatgaacc a

21

<210> 329

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: chemically synthesized

<400> 329

ggcttcacata attaccatca ca

22

<210> 330

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: chemically synthesized

<400> 330

cctttccctt tgactactct gcgagtg

27

<210> 331

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: chemically synthesized

<400> 331

gcacatgaaa tcaatgaacc a

21

<210> 332

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: chemically synthesized

<400> 332

acaacacctt gactcttctt ct

22

<210> 333

<211> 16

<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: chemically
synthesized

<400> 333
aagacctcca agcctcaggg actctg

26

<210> 334
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: chemically
synthesized

<400> 334
acaagaagaa acaccccttg at

22

<210> 335
<211> 32
<212> PRT
<213> Homo sapiens

<400> 335
Cys Asp Ser Gly Pro Cys Lys Asn Ser Gly Phe Cys Ser Glu Arg Trp
1 5 10 15
Gly Ser Phe Ser Cys Asp Cys Pro Val Gly Phe Gly Gly Lys Asp Cys
20 25 30

<210> 336
<211> 135
<212> PRT
<213> Homo sapiens

<400> 336
Phe Arg Thr Arg Ala Thr Gln Gly Val Leu Met Gln Val Gln Ala Gly
1 5 10 15
Pro His Ser Thr Leu Leu Cys Gln Leu Asp Arg Gly Leu Leu Ser Val
20 25 30
Thr Val Thr Arg Gly Ser Gly Arg Ala Ser His Leu Leu Leu Asp Gln
35 40 45
Val Thr Val Ser Asp Gly Arg Trp His Asp Leu Arg Leu Glu Leu Gln
50 55 60

Glu Glu Pro Gly Gly Arg Arg Gly His His Val Leu Met Val Ser Leu
65 70 75 80

Asp Phe Ser Leu Phe Gln Asp Thr Met Ala Val Gly Ser Glu Leu Gln
85 90 95

Gly Leu Lys Val Lys Gln Leu His Val Gly Gly Leu Pro Pro Gly Ser
100 105 110

Ala Glu Glu Ala Pro Gln Gly Leu Val Gly Cys Ile Gln Gly Val Trp
115 120 125

Leu Gly Ser Thr Pro Ser Gly
130 135

<210> 337

<211> 32

<212> PRT

<213> Homo sapiens

<400> 337

Cys Ala Ser Gly Pro Cys Pro Pro His Ala Asp Cys Arg Asp Leu Trp
1 5 10 15

Gln Thr Phe Ser Cys Thr Cys Gln Pro Gly Tyr Tyr Gly Pro Gly Cys
20 25 30

<210> 338

<211> 35

<212> PRT

<213> Homo sapiens

<400> 338

Cys Leu Leu Asn Pro Cys Gln Asn Gln Gly Ser Cys Arg His Leu Pro
1 5 10 15

Gly Ala Pro His Gly Tyr Thr Cys Asp Cys Val Gly Gly Tyr Phe Gly
20 25 30

His His Cys
35

<210> 339

<211> 58

<212> PRT

<213> Homo sapiens

<400> 339

Tyr Asp Ala Cys Pro Lys Ser Leu Arg Ser Gly Val Trp Trp Pro Gln
1 5 10 15

Thr Lys Phe Gly Val Leu Ala Thr Val Pro Cys Pro Arg Gly Ala Leu
 20 25 30

Gly Ala Ala Val Arg Leu Cys Asp Glu Ala Gln Gly Trp Leu Glu Pro
 35 40 45

Asp Leu Phe Asn Cys Thr Ser Pro Ala Phe
 50 55

<210> 340

<211> 54

<212> PRT

<213> Homo sapiens

<400> 340

Ser Lys Ala Ile Cys Val Gln Trp Asp Pro Pro Gly Leu Ala Glu Gln
 1 5 10 15

His Gly Val Trp Thr Ala Arg Asp Cys Glu Leu Val His Arg Asn Gly
 20 25 30

Ser His Ala Arg Cys Arg Cys Ser Arg Thr Gly Thr Phe Gly Val Leu
 35 40 45

Met Asp Ala Ser Pro Arg
 50

<210> 341

<211> 271

<212> PRT

<213> Homo sapiens

<400> 341

Leu Glu Leu Leu Ala Val Phe Thr His Val Val Val Ala Val Ser Val
 1 5 10 15

Ala Ala Leu Val Leu Thr Ala Ala Ile Leu Leu Ser Leu Arg Ser Leu
 20 25 30

Lys Ser Asn Val Arg Gly Ile His Ala Asn Val Ala Ala Leu Gly
 35 40 45

Val Ala Glu Leu Leu Phe Leu Leu Gly Ile His Arg Thr His Asn Gln
 50 55 60

Val Gln Asp Gln Gly Gln Gly Thr Cys Val Leu Met Thr Leu Leu Ala
 65 70 75 80

Gln Glu Ala Trp Gly Gln Asn Ser Gly Ser Glu Leu Val Cys Thr Ala
 85 90 95

Val Ala Ile Leu Leu His Tyr Phe Phe Leu Ser Thr Phe Ala Trp Leu
 100 105 110

Phe Val Gln Gly Leu His Leu Tyr Arg Met Gln Val Glu Pro Arg Asn
 115 120 125

Val Asp Arg Gly Ala Met Arg Phe Tyr His Ala Leu Gly Trp Gly Val
 130 135 140

Pro Ala Val Leu Leu Gly Leu Ala Val Gly Leu Asp Pro Glu Gly Tyr
 145 150 155 160

Gly Asn Pro Asp Phe Cys Trp Ile Ser Val His Glu Pro Leu Ile Trp
 165 170 175

Ser Phe Ala Gly Pro Val Val Leu Val Ile Val Met Asn Gly Thr Met
 180 185 190

Phe Leu Leu Ala Ala Arg Thr Ser Cys Ser Thr Gly Gln Arg Glu Ala
 195 200 205

Lys Lys Thr Ser Ala Leu Arg Thr Leu Arg Ser Ser Phe Leu Leu Leu
 210 215 220

Leu Leu Val Ser Ala Ser Trp Leu Phe Gly Leu Leu Ala Val Asn His
 225 230 235 240

Ser Ile Leu Ala Phe His Tyr Leu His Ala Gly Leu Cys Gly Leu Gln
 245 250 255

Gly Leu Ala Val Leu Leu Leu Phe Cys Val Leu Asn Ala Asp Ala
 260 265 270

<210> 342

<211> 311

<212> PRT

<213> Homo sapiens

<400> 342

Leu Gly Leu Ile His Phe Gly Phe Val Val Thr Tyr Leu Ser Glu Pro
 1 5 10 15

Leu Val Arg Gly Tyr Thr Thr Ala Ala Ala Val Gln Val Phe Val Ser
 20 25 30

Gln Leu Lys Tyr Val Phe Gly Leu His Leu Ser Ser His Ser Gly Pro
 35 40 45

Leu Ser Leu Ile Tyr Thr Val Leu Glu Val Cys Trp Lys Leu Pro Gln
 50 55 60

Ser Lys Val Gly Thr Val Val Thr Ala Ala Val Ala Gly Val Val Leu
 65 70 75 80

Val Val Val Lys Leu Leu Asn Asp Lys Leu Gln Gln Gln Leu Pro Met
 85 90 95

Pro Ile Pro Gly Glu Leu Leu Thr Leu Ile Gly Ala Thr Gly Ile Ser
 100 105 110

Tyr Gly Met Gly Leu Lys His Arg Phe Glu Val Asp Val Val Gly Asn
115 120 125

Ile Pro Ala Gly Leu Val Pro Pro Val Ala Pro Asn Thr Gln Leu Phe
130 135 140

Ser Lys Leu Val Gly Ser Ala Phe Thr Ile Ala Val Val Gly Phe Ala
145 150 155 160

Ile Ala Ile Ser Leu Gly Lys Ile Phe Ala Leu Arg His Gly Tyr Arg
165 170 175

Val Asp Ser Asn Gln Glu Leu Val Ala Leu Gly Leu Ser Asn Leu Ile
180 185 190

Gly Gly Ile Phe Gln Cys Phe Pro Val Ser Cys Ser Met Ser Arg Ser
195 200 205

Leu Val Gln Glu Ser Thr Gly Gly Asn Ser Gln Val Ala Gly Ala Ile
210 215 220

Ser Ser Leu Phe Ile Leu Leu Ile Ile Val Lys Leu Gly Glu Leu Phe
225 230 235 240

His Asp Leu Pro Lys Ala Val Leu Ala Ala Ile Ile Ile Val Asn Leu
245 250 255

Lys Gly Met Leu Arg Gln Leu Ser Asp Met Arg Ser Leu Trp Lys Ala
260 265 270

Asn Arg Ala Asp Leu Leu Ile Trp Leu Val Thr Phe Thr Ala Thr Ile
275 280 285

Leu Leu Asn Leu Asp Leu Gly Leu Val Val Ala Val Ile Phe Ser Leu
290 295 300

Leu Leu Val Val Val Arg Thr
305 310

<210> 343

<211> 189

<212> PRT

<213> Homo sapiens

<400> 343

Tyr Ser Glu Ala Lys Glu Val Arg Gly Val Lys Val Phe Arg Ser Ser
1 5 10 15

Ala Thr Val Tyr Phe Ala Asn Ala Glu Phe Tyr Ser Asp Ala Leu Lys
20 25 30

Gln Arg Cys Gly Val Asp Val Asp Phe Leu Ile Ser Gln Lys Lys Lys
35 40 45

Ile Leu Lys Lys Gln Glu Gln Leu Lys Leu Lys Gln Leu Gln Lys Glu

50	55	60
Glu Lys Leu Arg Lys Gln Ala Gly Pro Leu Leu Ser Ala Cys Leu Ala 65 70 75 80		
Pro Gln Gln Val Ser Ser Gly Asp Lys Met Glu Asp Ala Thr Ala Asn 85 90 95		
Gly Gln Glu Asp Ser Lys Ala Pro Asp Gly Ser Thr Leu Lys Ala Leu 100 105 110		
Gly Leu Pro Gln Pro Asp Phe His Ser Leu Ile Leu Asp Leu Gly Ala 115 120 125		
Leu Ser Phe Val Asp Thr Val Cys Leu Lys Ser Leu Lys Asn Ile Phe 130 135 140		
His Asp Phe Arg Glu Ile Glu Val Glu Val Tyr Met Ala Ala Cys His 145 150 155 160		
Ser Pro Val Val Ser Gln Leu Glu Ala Gly His Phe Phe Asp Ala Ser 165 170 175		
Ile Thr Lys Lys His Leu Phe Ala Ser Val His Asp Ala 180 185		

<210> 344
 <211> 42
 <212> PRT
 <213> Homo sapiens

<400> 344															
Leu	Glu	Glu	Phe	Val	Gln	Gly	Asn	Leu	Glu	Arg	Glu	Cys	Leu	Glu	Glu
1				5				10						15	
Lys	Cys	Ser	Phe	Glu	Glu	Ala	Arg	Glu	Val	Phe	Glu	Asn	Thr	Glu	Arg
			20					25					30		
Thr	Thr	Glu	Phe	Trp	Lys	Gln	Tyr	Val	Asp						
		35					40								

<210> 345
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 345															
Cys	Glu	Ser	Asn	Pro	Cys	Leu	Asn	Gly	Gly	Ser	Cys	Lys	Asp	Asp	Ile
1				5				10						15	
Asn	Ser	Tyr	Glu	Cys	Trp	Cys	Pro	Phe	Gly	Phe	Glu	Gly	Lys	Asn	Cys
			20					25					30		

<210> 346

<211> 50

<212> PRT

<213> Homo sapiens

<400> 346

Glu Asn Thr Glu Arg Thr Thr Glu Phe Trp Lys Gln Tyr Val Asp Gly
1 5 10 15

Asp Gln Cys Glu Ser Asn Pro Cys Leu Asn Gly Gly Ser Cys Lys Asp
20 25 30

Asp Ile Asn Ser Tyr Glu Cys Trp Cys Pro Phe Gly Phe Glu Gly Lys
35 40 45

Asn Cys
50

<210> 347

<211> 228

<212> PRT

<213> Homo sapiens

<400> 347

Val Val Gly Gly Glu Asp Ala Lys Pro Gly Gln Phe Pro Trp Gln Val
1 5 10 15

Val Leu Asn Gly Lys Val Asp Ala Phe Cys Gly Gly Ser Ile Val Asn
20 25 30

Glu Lys Trp Ile Val Thr Ala Ala His Cys Val Glu Thr Gly Val Lys
35 40 45

Ile Thr Val Val Ala Gly Glu His Asn Ile Glu Glu Thr Glu His Thr
50 55 60

Glu Gln Lys Arg Asn Val Ile Arg Ile Ile Pro His His Asn Tyr Asn
65 70 75 80

Ala Ala Ile Asn Lys Tyr Asn His Asp Ile Ala Leu Leu Glu Leu Asp
85 90 95

Glu Pro Leu Val Leu Asn Ser Tyr Val Thr Pro Ile Cys Ile Ala Asp
100 105 110

Lys Glu Tyr Thr Asn Ile Phe Leu Lys Phe Gly Ser Gly Tyr Val Ser
115 120 125

Gly Trp Gly Arg Val Phe His Lys Gly Arg Ser Ala Leu Val Leu Gln
130 135 140

Tyr Leu Arg Val Pro Leu Val Asp Arg Ala Thr Cys Leu Arg Ser Thr
145 150 155 160

Lys Phe Thr Ile Tyr Asn Asn Met Phe Cys Ala Gly Phe His Glu Gly
165 170 175

Gly Arg Asp Ser Cys Gln Gly Asp Ser Gly Gly Pro His Val Thr Glu
180 185 190

Val Glu Gly Thr Ser Phe Leu Thr Gly Ile Ile Ser Trp Gly Glu Glu
195 200 205

Cys Ala Met Lys Gly Lys Tyr Gly Ile Tyr Thr Lys Val Ser Arg Tyr
210 215 220

Val Asn Trp Ile
225

<210> 348

<211> 154

<212> PRT

<213> Homo sapiens

<400> 348

Trp Cys Tyr Glu Val Gln Ala Glu Ser Ser Asn Tyr Pro Cys Leu Val
1 5 10 15

Pro Val Lys Trp Gly Gly Asn Cys Gln Lys Asp Arg Gln Ser Pro Ile
20 25 30

Asn Ile Val Thr Thr Lys Ala Lys Val Asp Lys Lys Leu Gly Arg Phe
35 40 45

Phe Phe Ser Gly Tyr Asp Lys Lys Gln Thr Trp Thr Val Gln Asn Asn
50 55 60

Gly His Ser Val Met Met Leu Leu Glu Asn Lys Ala Ser Ile Ser Gly
65 70 75 80

Gly Gly Leu Pro Ala Pro Tyr Gln Ala Lys Gln Leu His Leu His Trp
85 90 95

Ser Asp Leu Pro Tyr Lys Gly Ser Glu His Ser Leu Asp Gly Glu His
100 105 110

Phe Ala Met Glu Met His Ile Val His Glu Lys Glu Lys Gly Thr Ser
115 120 125

Arg Asn Val Lys Glu Ala Gln Asp Pro Glu Asp Glu Ile Ala Val Leu
130 135 140

Ala Phe Leu Val Glu Ile Gly Arg Met Asn
145 150

<210> 349

<211> 115

<212> PRT

<213> Homo sapiens

<400> 349

Gln Ala Gly Thr Gln Val Asn Glu Gly Phe Gln Pro Leu Val Glu Ala
1 5 10 15

Leu Ser Asn Ile Pro Lys Pro Glu Met Ser Thr Thr Met Ala Glu Ser
20 25 30

Ser Leu Leu Asp Leu Leu Pro Lys Glu Glu Lys Leu Arg His Tyr Phe
35 40 45

Arg Tyr Leu Gly Ser Leu Thr Thr Pro Thr Cys Asp Glu Lys Val Val
50 55 60

Tip Thr Val Phe Arg Glu Pro Ile Gln Leu His Arg Glu Gln Ile Leu
65 70 75 80

Ala Phe Ser Gln Lys Leu Tyr Tyr Asp Lys Glu Gln Thr Val Ser Met
85 90 95

Lys Asp Asn Val Arg Pro Leu Gln Gln Leu Gly Gln Arg Thr Val Ile
100 105 110

Lys Ser Gly
115

<210> 350

<211> 52

<212> PRT

<213> Homo sapiens

<400> 350

Gly Ser Asp Ala Ile Leu Ser Cys Ala Trp Thr Gly Asn Pro Ser Leu
1 5 10 15

Thr Ile Val Trp Met Lys Arg Gly Ser Gly Val Val Leu Ser Asn Glu
20 25 30

Lys Thr Leu Thr Leu Lys Ser Val Arg Gln Glu Asp Ala Gly Lys Tyr
35 40 45

Val Cys Arg Ala
50

<210> 351

<211> 146

<212> PRT

<213> Homo sapiens

<400> 351

Asp Met Asn Gln Pro Leu Ala His Tyr Phe Ile Ser Ser Ser His Asn
1 5 10 15

Thr Tyr Leu Thr Asp Ser Gln Ile Gly Gly Pro Ser Ser Thr Glu Ala
20 25 30

Tyr Val Arg Ala Phe Ala Gln Gly Cys Arg Cys Val Glu Leu Asp Cys
35 40 45

Trp Glu Gly Pro Gly Gly Glu Pro Val Ile Tyr His Gly His Thr Leu
50 55 60

Thr Ser Lys Ile Leu Phe Arg Asp Val Val Gln Ala Val Arg Asp His
65 70 75 80

Ala Phe Thr Val Ser Pro Tyr Pro Val Ile Leu Ser Leu Glu Asn His
85 90 95

Cys Gly Leu Glu Gln Gln Ala Ala Met Ala Arg His Leu Cys Thr Ile
100 105 110

Leu Gly Asp Met Leu Val Thr Gln Ala Leu Asp Ser Pro Asn Pro Glu
115 120 125

Glu Leu Pro Ser Pro Glu Gln Leu Lys Gly Arg Val Leu Val Lys Gly
130 135 140

Lys Lys
145

<210> 352

<211> 80

<212> PRT

<213> Homo sapiens

<400> 352

Arg Leu Leu Lys Ala Trp Gly Asn Ser Phe Val Arg His Asn Ala Arg
1 5 10 15

Gln Leu Thr Arg Val Tyr Pro Leu Gly Leu Arg Met Asn Ser Ala Asn
20 25 30

Tyr Ser Pro Gln Glu Met Trp Asn Ser Gly Cys Gln Leu Val Ala Leu
35 40 45

Asn Phe Gln Thr Pro Gly Tyr Glu Met Asp Leu Asn Ala Gly Arg Phe
50 55 60

Leu Val Asn Gly Gln Cys Gly Tyr Val Leu Lys Pro Ala Cys Leu Arg
65 70 75 80

<210> 353

<211> 91

<212> PRT

<213> Homo sapiens

<400> 353

Leu Ser Ile Gln Val Leu Thr Ala Gln Gln Leu Pro Lys Leu Asn Ala
 1 5 10 15
 Glu Lys Pro His Ser Ile Val Asp Pro Leu Val Arg Ile Glu Ile His
 20 25 30
 Gly Val Pro Ala Asp Cys Ala Arg Gln Glu Thr Asp Tyr Val Leu Asn
 35 40 45
 Asn Gly Phe Asn Pro Arg Trp Gly Gln Thr Leu Gln Phe Gln Leu Arg
 50 55 60
 Ala Pro Glu Leu Ala Leu Val Arg Phe Val Val Glu Asp Tyr Asp Ala
 65 70 75 80
 Thr Ser Pro Asn Asp Phe Val Gly Gln Phe Thr
 85 90

<210> 354

<211> 294

<212> PRT

<213> Homo sapiens

<400> 354

Leu Asn Asp Gly His Phe Met Pro Val Leu Gly Phe Gly Thr Tyr Ala
 1 5 10 15
 Pro Ala Glu Val Pro Lys Ser Lys Ala Leu Glu Ala Val Lys Leu Ala
 20 25 30
 Ile Glu Ala Gly Phe His His Ile Asp Ser Ala His Val Tyr Asn Asn
 35 40 45
 Glu Glu Gln Val Gly Leu Ala Ile Arg Ser Lys Ile Ala Asp Gly Ser
 50 55 60
 Val Lys Arg Glu Asp Ile Phe Tyr Thr Ser Lys Leu Trp Ser Asn Ser
 65 70 75 80
 His Arg Pro Glu Leu Val Arg Pro Ala Leu Glu Arg Ser Leu Lys Asn
 85 90 95
 Leu Gln Leu Asp Tyr Val Asp Leu Tyr Leu Ile His Phe Pro Val Ser
 100 105 110
 Val Lys Pro Gly Glu Glu Val Ile Pro Lys Asp Glu Asn Gly Lys Ile
 115 120 125
 Leu Phe Asp Thr Val Asp Leu Cys Ala Thr Trp Lys Ala Leu Glu Lys
 130 135 140
 Cys Arg Asp Ala Gly Leu Thr Arg Ser Ile Arg Val Ser Ser Phe Asn
 145 150 155 160
 His Lys Leu Leu Glu Leu Ile Leu Asn Lys Pro Gly Leu Arg Tyr Lys
 165 170 175

Pro Thr Cys Asn Gln Val Glu Cys His Pro Tyr Leu Asn Gln Ser Lys
180 185 190

Leu Leu Glu Phe Cys Lys Ser Lys Asp Ile Val Leu Val Ala Tyr Ser
195 200 205

Ala Leu Glv Ser Gln Arg Asp Pro Gln Trp Val Asp Pro Asp Cvs Pro
210 215 220

His Leu Leu Glu Glu Pro Ile Leu Lys Ser Ile Ala Lys Lys His Ser
225 230 235 240

Arg Ser Pro Gly Gln Val Ala Leu Arg Tyr Gln Leu Gln Arg Gly Val
245 250 255

Val Val Leu Ala Lys Ser Phe Ser Gln Glu Arg Ile Lys Glu Asn Phe
260 265 270

Gln Val Phe Asp Phe Glu Leu Thr Pro Glu Asp Met Lys Ala Ile Asp
275 280 285

Gly Leu Asn Arg Asn Leu
290

<210> 355

<211> 38

<212> PRT

<213> Homo sapiens

<400> 355

Met Lys Glu His Ser Lys Thr Phe Ser Tyr Ala Phe Asp Phe Leu Asp
1 5 10 15

Leu Lys Arg Lys Lys Ala Ile Trp Ala Ile Tyr Ala Val Cys Arg Ile
20 25 30

Ile Asp Asp Ser Ile Asp
35

<210> 356

<211> 194

<212> PRT

<213> Homo sapiens

<400> 356

Asp Ala Ala Ile Met Asn Ala Leu Ser Asn Thr Leu Asn Thr Tyr Ser
1 5 10 15

Ile Pro Lys Lys Pro Phe Glu Ser Leu Ile Gln Tyr Val Lys Glu Asp
20 25 30

Leu Val Leu Lys Glu Met Lys Thr Asp Ser Asp Leu Tyr Glu Tyr Cys
35 40 45

Tyr Gly Val Val Gly Thr Val Gly Glu Leu Leu Thr Pro Ile Leu Thr
 50 55 60

Ser Ser Asn Glu Asn Asn Phe Glu Gln Ala Glu Glu Ala Ala Ile Ala
 65 70 75 80

Leu Gly Lys Ala Met Gln Ile Thr Asn Ile Leu Arg Asp Val Gly Glu
 85 90 95

Asn Phe Gln Asn Gly Arg Ile Tyr Leu Ser Val Glu Lys Leu Ala Gln
 100 105 110

Tyr Arg Val Asn Leu His Ser Ile Tyr Tyr Glu Gly Val Ser Pro Asn
 115 120 125

Tyr Ile Glu Leu Trp Glu Ser Tyr Ala Thr Glu Thr Val Arg Leu Tyr
 130 135 140

Asp Ile Ala Leu Asn Gly Ile Asn Tyr Phe Asp Glu Glu Val Arg Tyr
 145 150 155 160

Ile Ile Glu Leu Ala Ala Ile Ala Tyr His Glu Ile Leu Val Glu Val
 165 170 175

Arg Lys Ala Asn Tyr Thr Leu His Lys Lys Val Tyr Val Ser Lys Leu
 180 185 190

Lys Lys

<210> 357

<211> 24

<212> PRT

<213> Homo sapiens

<400> 357

Thr Thr Glu Phe Leu Glu Phe Ser Phe Asn Phe Leu Pro Thr Ile His
 1 5 10 15

Asn Arg Thr Phe Ser Asn Gln His
 20

<210> 358

<211> 24

<212> PRT

<213> Homo sapiens

<400> 358

Val Leu Arg His Leu Asn Leu Lys Gly Asn His Phe Gln Asp Gly Thr
 1 5 10 15

Ile Thr Lys Thr Asn Leu Leu Gln
 20

<210> 359

<211> 24

<212> PRT

<213> Homo sapiens

<400> 359

Ser Leu Glu Val Leu Ile Leu Ser Ser Cys Gly Leu Leu Ser Ile Asp
1 5 10 15

Gln Gln Ala Phe His Ser Leu Gly
20

<210> 360

<211> 24

<212> PRT

<213> Homo sapiens

<400> 360

Lys Met Ser His Val Asp Leu Ser His Asn Ser Leu Thr Cys Asp Ser
1 5 10 15

Ile Asp Ser Leu Ser His Leu Lys
20

<210> 361

<211> 64

<212> PRT

<213> Homo sapiens

<400> 361

Asn Pro Leu Asp Cys Thr Cys Ser Asn Ile His Phe Leu Thr Trp Tyr
1 5 10 15

Lys Glu Asn Leu His Lys Leu Glu Gly Ser Glu Glu Thr Thr Cys Ala
20 25 30

Asn Pro Pro Ser Leu Arg Gly Val Lys Leu Ser Thr Ser Ile Trp Leu
35 40 45

Pro Thr Ala Leu Thr Ser Ser His Pro Val Ser Ser Leu Ser Cys Pro
50 55 60

<210> 362

<211> 245

<212> PRT

<213> Homo sapiens

<400> 362

Val Leu Met Ser Leu Leu His Leu Gly Ala Val Tyr Ser Leu Val Leu
1 5 10 15

Ile Pro Lys Ala Lys Pro Leu Thr Leu Leu Trp Ala Tyr Phe Cys Phe
 20 25 30
 Leu Leu Ala Ala Leu Gly Val Thr Ala Gly Ala His Arg Leu Trp Ser
 35 40 45
 His Arg Ser Tyr Arg Ala Lys Leu Pro Leu Arg Ile Phe Leu Ala Val
 50 55 60
 Ala Asn Ser Met Ala Phe Gln Asn Asp Ile Phe Glu Trp Ser Arg Asp
 65 70 75 80
 His Arg Ala His His Lys Tyr Ser Glu Thr Asp Ala Asp Pro His Asn
 85 90 95
 Ala Arg Arg Gly Phe Phe Phe Ser His Ile Gly Trp Leu Phe Val Arg
 100 105 110
 Lys His Arg Asp Val Ile Glu Lys Gly Arg Lys Leu Asp Val Thr Asp
 115 120 125
 Leu Leu Ala Asp Pro Val Val Arg Ile Gln Arg Lys Tyr Tyr Lys Ile
 130 135 140
 Ser Val Val Leu Met Cys Phe Val Val Pro Thr Leu Val Pro Trp Tyr
 145 150 155 160
 Ile Trp Gly Glu Ser Leu Trp Asn Ser Tyr Phe Leu Ala Ser Ile Leu
 165 170 175
 Arg Tyr Thr Ile Ser Leu Asn Ile Ser Trp Leu Val Asn Ser Ala Ala
 180 185 190
 His Met Tyr Gly Asn Arg Pro Tyr Asp Lys His Ile Ser Pro Arg Gln
 195 200 205
 Asn Pro Leu Val Ala Leu Gly Ala Ile Gly Glu Gly Phe His Asn Tyr
 210 215 220
 His His Thr Phe Pro Phe Asp Tyr Ser Ala Ser Glu Phe Gly Leu Asn
 225 230 235 240
 Phe Asn Pro Thr Thr
 245

<210> 363

<211> 115

<212> PRT

<213> Homo sapiens

<400> 363

Val Cys Leu Thr Leu Ser Gly Leu Ser Lys Arg Gln Leu Gly Leu Cys
 1 5 10 15
 Leu Arg Asn Pro Asp Val Thr Ala Ser Ala Leu Gln Gly Leu His Ile
 20 25 30

Ala Val His Glu Cys Gln His Gln Leu Arg Asp Gln Arg Trp Asn Cys
35 40 45

Ser Ala Leu Glu Gly Gly Gly Arg Leu Pro His His Ser Ala Ile Leu
50 55 60

Lys Arg Glu Phe Arg Glu Ser Ala Phe Ser Phe Ser Met Leu Ala Ala
65 70 75 80

Gly Val Met His Ala Val Ala Thr Ala Cys Ser Leu Gly Lys Leu Val
85 90 95

Ser Cys Gly Cys Gly Trp Lys Gly Ser Gly Glu Gln Asp Arg Leu Arg
100 105 110

Ala Lys Leu
115

<210> 364

<211> 73

<212> PRT

<213> Homo sapiens

<400> 364

Val Ser Cys Gly Cys Gly Trp Lys Gly Ser Gly Glu Gln Asp Arg Leu
1 5 10 15

Arg Ala Lys Leu Leu Gln Leu Gln Ala Leu Ser Arg Gly Lys Ala Pro
20 25 30

Arg Asp Ile Gln Ala Arg Met Arg Ile His Asn Asn Arg Val Gly Arg
35 40 45

Gln Val Val Thr Glu Asn Leu Lys Arg Lys Cys Lys Cys His Gly Thr
50 55 60

Ser Gly Ser Cys Gln Phe Lys Thr Cys
65 70

<210> 365

<211> 169

<212> PRT

<213> Homo sapiens

<400> 365

Arg Asp Ile Gln Ala Arg Met Arg Ile His Asn Asn Arg Val Gly Arg
1 5 10 15

Gln Val Val Thr Glu Asn Leu Lys Arg Lys Cys Lys Cys His Gly Thr
20 25 30

Ser Gly Ser Cys Gln Phe Lys Thr Cys Trp Arg Ala Ala Pro Glu Phe
35 40 45

Arg Ala Val Gly Ala Ala Leu Arg Glu Arg Val Gly Arg Ala Ile Phe
 50 55 60
 Ile Asp Thr His Asn Arg Asn Ser Gly Ala Phe Gln Pro Arg Leu Arg
 65 70 75 80
 Pro Arg Arg Leu Ser Gly Glu Leu Val Tyr Phe Glu Lys Ser Pro Asp
 85 90 95
 Phe Cys Glu Arg Asp Pro Thr Met Glv Ser Pro Glv Thr Arg Glv Arg
 100 105 110
 Ala Cys Asn Lys Thr Ser Arg Leu Leu Asp Gly Cys Gly Ser Leu Cys
 115 120 125
 Cys Gly Arg Gly His Asn Val Leu Arg Gln Thr Arg Val Glu Arg Cys
 130 135 140
 His Cys Arg Phe His Trp Cys Cys Tyr Val Leu Cys Asp Glu Cys Lys
 145 150 155 160
 Val Thr Glu Trp Val Asn Val Cys Lys
 165

<210> 366
 <211> 68
 <212> PRT
 <213> Homo sapiens

<400> 366
 Gly Asp Thr Ala Val Leu Arg Cys Tyr Leu Glu Asp Gly Ala Ser Lys
 1 5 10 15
 Gly Ala Trp Leu Asn Arg Ser Ser Ile Ile Phe Ala Gly Gly Asp Lys
 20 25 30
 Trp Ser Val Asp Pro Arg Val Ser Ile Ser Thr Leu Asn Lys Arg Asp
 35 40 45
 Tyr Ser Leu Gln Ile Gln Asn Val Asp Val Thr Asp Asp Gly Pro Tyr
 50 55 60
 Thr Cys Ser Val
 65

<210> 367
 <211> 53
 <212> PRT
 <213> Homo sapiens

<400> 367
 Gly Thr Asn Val Thr Leu Thr Cys Leu Ala Thr Gly Lys Pro Glu Pro
 1 5 10 15
 Ser Ile Ser Trp Arg His Ile Ser Pro Ser Ala Lys Pro Phe Glu Asn

20

25

30

Gly Gln Tyr Leu Asp Ile Tyr Gly Ile Thr Arg Asp Gln Ala Gly Glu
 35 40 45

Tyr Glu Cys Ser Ala
 50

<210> 368

<211> 62

<212> PRT

<213> Homo sapiens

<400> 368

Gly Arg Ser Gly Leu Ile Arg Cys Glu Gly Ala Gly Val Pro Pro Pro
 1 5 10 15

Ala Phe Glu Trp Tyr Lys Gly Glu Lys Lys Leu Phe Asn Gly Gln Gln
 20 25 30

Gly Ile Ile Ile Gln Asn Phe Ser Thr Arg Ser Ile Leu Thr Val Thr
 35 40 45

Asn Val Thr Gln Glu His Phe Gly Asn Tyr Thr Cys Val Ala
 50 55 60

<210> 369

<211> 198

<212> PRT

<213> Homo sapiens

<400> 369

Gln Pro Leu Phe Met Phe Gly Val Leu Leu Gly Ser Val Thr Phe Gly
 1 5 10 15

Tyr Phe Ser Asp Arg Leu Gly Arg Arg Val Val Leu Trp Ala Thr Ser
 20 25 30

Ser Ser Met Phe Leu Phe Gly Ile Ala Ala Ala Phe Ala Val Asp Tyr
 35 40 45

Tyr Thr Phe Met Ala Ala Arg Phe Phe Leu Ala Met Val Ala Ser Gly
 50 55 60

Tyr Leu Val Val Gly Phe Val Tyr Val Met Glu Phe Ile Gly Met Lys
 65 70 75 80

Ser Arg Thr Trp Ala Ser Val His Leu His Ser Phe Phe Ala Val Gly
 85 90 95

Thr Leu Leu Val Ala Leu Thr Gly Tyr Leu Val Arg Thr Trp Trp Leu
 100 105 110

Tyr Gln Met Ile Leu Ser Thr Val Thr Val Pro Phe Ile Leu Cys Cys
 115 120 125

Trp Val Leu Pro Glu Thr Pro Phe Trp Leu Leu Ser Glu Gly Arg Tyr
130 135 140

Glu Glu Ala Gln Lys Ile Val Asp Ile Met Ala Lys Trp Asn Arg Ala
145 150 155 160

Ser Ser Cys Lys Leu Ser Glu Leu Leu Ser Leu Asp Leu Gln Gly Pro
165 170 175

Val Ser Asn Ser Pro Thr Glu Val Gln Lys His Asn Leu Ser Tyr Leu
180 185 190

Phe Tyr Asn Trp Ser Ile
195

<210> 370

<211> 95

<212> PRT

<213> Homo sapiens

<400> 370

Leu Phe Leu Leu Gly Val Val Glu Ile Pro Ala Tyr Thr Phe Val Cys
1 5 10 15

Ile Ala Met Asp Lys Val Gly Arg Arg Thr Val Leu Ala Tyr Ser Leu
20 25 30

Phe Cys Ser Ala Leu Ala Cys Gly Val Val Met Val Ile Pro Gln Lys
35 40 45

His Tyr Ile Leu Gly Val Val Thr Ala Met Val Gly Lys Phe Ala Ile
50 55 60

Gly Ala Ala Phe Gly Leu Ile Tyr Leu Tyr Thr Ala Glu Leu Tyr Pro
65 70 75 80

Thr Ile Val Arg Ser Leu Ala Val Gly Ser Gly Ser Met Val Cys
85 90 95

<210> 371

<211> 419

<212> PRT

<213> Homo sapiens

<400> 371

Lys Lys Glu Phe Pro Cys Val Asp Gly Tyr Ile Tyr Asp Gln Asn Thr
1 5 10 15

Trp Lys Ser Thr Ala Val Thr Gln Trp Asn Leu Val Cys Asp Arg Lys
20 25 30

Trp Leu Ala Met Leu Ile Gln Pro Leu Phe Met Phe Gly Val Leu Leu
35 40 45

Gly Ser Val Thr Phe Gly Tyr Phe Ser Asp Arg Leu Gly Arg Arg Val
 50 55 60
 Val Leu Trp Ala Thr Ser Ser Ser Met Phe Leu Phe Gly Ile Ala Ala
 65 70 75 80
 Ala Phe Ala Val Asp Tyr Tyr Thr Phe Met Ala Ala Arg Phe Phe Leu
 85 90 95
 Ala Met Val Ala Ser Glv Trp Leu Val Val Glv Phe Val Trp Val Met
 100 105 110
 Glu Phe Ile Gly Met Lys Ser Arg Thr Trp Ala Ser Val His Leu His
 115 120 125
 Ser Phe Phe Ala Val Gly Thr Leu Leu Val Ala Leu Thr Gly Tyr Leu
 130 135 140
 Val Arg Thr Trp Trp Leu Tyr Gln Met Ile Leu Ser Thr Val Thr Val
 145 150 155 160
 Pro Phe Ile Leu Cys Cys Trp Val Leu Pro Glu Thr Pro Phe Trp Leu
 165 170 175
 Leu Ser Glu Gly Arg Tyr Glu Glu Ala Gln Lys Ile Val Asp Ile Met
 180 185 190
 Ala Lys Trp Asn Arg Ala Ser Ser Cys Lys Leu Ser Glu Leu Leu Ser
 195 200 205
 Leu Asp Leu Gln Gly Pro Val Ser Asn Ser Pro Thr Glu Val Gln Lys
 210 215 220
 His Asn Leu Ser Tyr Leu Phe Tyr Asn Trp Ser Ile Thr Lys Arg Thr
 225 230 235 240
 Leu Thr Val Trp Leu Ile Trp Phe Thr Gly Ser Leu Gly Phe Tyr Ser
 245 250 255
 Phe Ser Leu Asn Ser Val Asn Leu Gly Gly Asn Glu Tyr Leu Asn Leu
 260 265 270
 Phe Leu Leu Gly Val Val Glu Ile Pro Ala Tyr Thr Phe Val Cys Ile
 275 280 285
 Ala Met Asp Lys Val Gly Arg Arg Thr Val Leu Ala Tyr Ser Leu Phe
 290 295 300
 Cys Ser Ala Leu Ala Cys Gly Val Val Met Val Ile Pro Gln Lys His
 305 310 315 320
 Tyr Ile Leu Gly Val Val Thr Ala Met Val Gly Lys Phe Ala Ile Gly
 325 330 335
 Ala Ala Phe Gly Leu Ile Tyr Leu Tyr Thr Ala Glu Leu Tyr Pro Thr
 340 345 350

Ile Val Arg Ser Leu Ala Val Gly Ser Gly Ser Met Val Cys Arg Leu
 355 360 365

Ala Ser Ile Leu Ala Pro Phe Ser Val Asp Leu Ser Ser Ile Trp Ile
 370 375 380

Phe Ile Pro Gln Leu Phe Val Gly Thr Met Ala Leu Leu Ser Gly Val
 385 390 395 400

Leu Thr Leu Lys Leu Pro Glu Thr Leu Gly Lys Arg Leu Ala Thr Thr
 405 410 415

Trp Glu Glu

<210> 372

<211> 283

<212> PRT

<213> Homo sapiens

<400> 372

Ser Gly Lys Ala Val Leu Val Thr Gly Cys Asp Ser Gly Phe Gly Phe
 1 5 10 15

Ser Leu Ala Lys His Leu His Ser Lys Gly Phe Leu Val Phe Ala Gly
 20 25 30

Cys Leu Met Lys Asp Lys Gly His Asp Gly Val Lys Glu Leu Asp Ser
 35 40 45

Leu Asn Ser Asp Arg Leu Arg Thr Val Gln Leu Asn Val Cys Ser Ser
 50 55 60

Glu Glu Val Glu Lys Val Val Glu Ile Val Arg Ser Ser Leu Lys Asp
 65 70 75 80

Pro Glu Lys Gly Met Trp Gly Leu Val Asn Asn Ala Gly Ile Ser Thr
 85 90 95

Phe Gly Glu Val Glu Phe Thr Ser Leu Glu Thr Tyr Lys Gln Val Ala
 100 105 110

Glu Val Asn Leu Trp Gly Thr Val Arg Met Thr Lys Ser Phe Leu Pro
 115 120 125

Leu Ile Arg Arg Ala Lys Gly Arg Val Val Asn Ile Ser Ser Met Leu
 130 135 140

Gly Arg Met Ala Asn Pro Ala Arg Ser Pro Tyr Cys Ile Thr Lys Phe
 145 150 155 160

Gly Val Glu Ala Phe Ser Asp Cys Leu Arg Tyr Glu Met Tyr Pro Leu
 165 170 175

Gly Val Lys Val Ser Val Val Glu Pro Gly Asn Phe Ile Ala Ala Thr
 180 185 190

Ser Leu Tyr Ser Pro Glu Ser Ile Gln Ala Ile Ala Lys Lys Met Trp
 195 200 205

Glu Glu Leu Pro Glu Val Val Arg Lys Asp Tyr Gly Lys Lys Tyr Phe
 210 215 220

Asp Glu Lys Ile Ala Lys Met Glu Thr Trp Cys Ser Ser Gly Ser Thr
 225 230 235 240

Asp Thr Ser Pro Val Ile Asp Ala Val Thr His Ala Leu Thr Ala Thr
 245 250 255

Thr Pro Tyr Thr Arg Tyr His Pro Met Asp Tyr Tyr Trp Trp Leu Arg
 260 265 270

Met Gln Ile Met Thr His Leu Pro Gly Ala Ile
 275 280

<210> 373

<211> 27

<212> PRT

<213> Homo sapiens

<400> 373

Cys Pro Arg Asn Cys His Gly Asn Gly Glu Cys Val Ser Gly Thr Cys
 1 5 10 15

His Cys Phe Pro Gly Phe Leu Gly Pro Asp Cys
 20 25

<210> 374

<211> 28

<212> PRT

<213> Homo sapiens

<400> 374

Cys Ile Asp Pro Gln Cys Gly Gly Arg Gly Ile Cys Ile Met Gly Ser
 1 5 10 15

Cys Ala Cys Ser Ser Gly Tyr Lys Gly Glu Ser Cys
 20 25

<210> 375

<211> 28

<212> PRT

<213> Homo sapiens

<400> 375

Cys Ile Asp Pro Gly Cys Ser Asn His Gly Val Cys Ile His Gly Glu
 1 5 10 15

Cys His Cys Ser Pro Gly Trp Gly Gly Ser Asn Cys
 20 25

<210> 376
 <211> 49
 <212> PRT
 <213> Homo sapiens

<400> 376
 Cys Ser Ser Gly Tyr Lys Gly Glu Ser Cys Glu Glu Ala Asp Cys Ile
 1 5 10 15
 Asp Pro Gly Cys Ser Asn His Gly Val Cys Ile His Gly Glu Cys His
 20 25 30
 Cys Ser Pro Gly Trp Gly Gly Ser Asn Cys Glu Ile Leu Lys Thr Met
 35 40 45

Cys

<210> 377
 <211> 29
 <212> PPT
 <213> Homo sapiens

<400> 377
 Cys Pro Asp Gln Cys Ser Gly His Gly Thr Tyr Leu Gln Glu Ser Gly
 1 5 10 15
 Ser Cys Thr Cys Asp Pro Asn Trp Thr Gly Pro Asp Cys
 20 25

<210> 378
 <211> 27
 <212> PRT
 <213> Homo sapiens

<400> 378
 Cys Ser Val Asp Cys Gly Ser His Gly Val Cys Met Gly Gly Thr Cys
 1 5 10 15
 Arg Cys Glu Glu Gly Trp Thr Gly Pro Ala Cys
 20 25

<210> 379
 <211> 27
 <212> PRT
 <213> Homo sapiens

<400> 379
 Cys His Pro Arg Cys Ala Glu His Gly Thr Cys Lys Asp Gly Lys Cys
 1 5 10 15
 Glu Cys Ser Gln Gly Trp Asn Gly Glu His Cys

20

25

<210> 380

<211> 31

<212> PRT

<213> Homo sapiens

<400> 380

Cys Pro Gly Leu Cys Asn Ser Asn Gly Arg Cys Thr Leu Asn Gln Asn
 1 5 10 15

Gly Gly His Cys Val Cys Gln Pro Gly Trp Arg Gly Ala Gly Cys
 20 25 30

<210> 381

<211> 18

<212> PRT

<213> Homo sapiens

<400> 381

Phe Pro Ser Gly Asn Val Thr Ser Val Leu Glu Leu Arg Asn Lys Asp
 1 5 10 15

Phe Arg

<210> 382

<211> 28

<212> PRT

<213> Homo sapiens

<400> 382

Leu Glu Trp Pro Thr Asp Leu Ala Ile Asn Pro Met Asp Asn Ser Ile
 1 5 10 15

Tyr Val Leu Asp Asn Asn Val Val Leu Gln Ile Thr
 20 25

<210> 383

<211> 28

<212> PRT

<213> Homo sapiens

<400> 383

Leu Ser Ala Pro Ser Ser Leu Ala Ala Ser Pro Asp Gly Thr Leu Tyr
 1 5 10 15

Ile Ala Asp Leu Gly Asn Ile Arg Ile Arg Ala Val
 20 25

<210> 384

<211> 26

<212> PRT

<213> Homo sapiens

<400> 384

Val Asn Val Thr Tyr Ser Ser Thr Gly Gln Ile Ala Ser Ile Gln Arg
1 5 10 15

Gly Thr Thr Ser Glu Lys Val Asp Tyr Asp
20 25

<210> 385

<211> 27

<212> PRT

<213> Homo sapiens

<400> 385

Cys Pro Arg Asn Cys His Gly Asn Gly Glu Cys Val Ser Gly Thr Cys
1 5 10 15

His Cys Phe Pro Gly Phe Leu Gly Pro Asp Cys
20 25

<210> 386

<211> 28

<212> PRT

<213> Homo sapiens

<400> 386

Cys Ile Asp Pro Gln Cys Gly Gly Arg Gly Ile Cys Ile Met Gly Ser
1 5 10 15

Cys Ala Cys Asn Ser Gly Tyr Lys Gly Glu Ser Cys
20 25

<210> 387

<211> 28

<212> PRT

<213> Homo sapiens

<400> 387

Cys Ile Asp Pro Gly Cys Ser Asn His Gly Val Cys Ile His Gly Glu
1 5 10 15

Cys His Cys Ser Pro Gly Trp Gly Ser Asn Cys
20 25

<210> 388

<211> 29

<212> PRT

<213> Homo sapiens

<400> 388

Cys Pro Asp Gln Cys Ser Gly His Gly Thr Tyr Leu Gln Glu Ser Gly

1 5 10 15

Ser Cys Thr Cys Asp Pro Asn Trp Thr Gly Pro Asp Cys
20 25

<210> 389
 <211> 27
 <212> PRT
 <213> Homo sapiens

<400> 389
 Cys Ser Val Asp Cys Gly Ser His Gly Val Cys Met Glv Gly Thr Cys
1 5 10 15

Arg Cys Glu Glu Gly Trp Thr Gly Pro Thr Cys
20 25

<210> 390
 <211> 27
 <212> PRT
 <213> Homo sapiens

<400> 390
 Cys His Pro Arg Cys Ala Glu His Gly Thr Cys Lys Asp Gly Lys Cys
1 5 10 15

Glu Cys Ser His Gly Trp Asn Gly Glu His Cys
20 25

<210> 391
 <211> 31
 <212> PRT
 <213> Homo sapiens

<400> 391
 Cys Pro Gly Leu Cys Asn Ser Asn Gly Arg Cys Thr Leu Asp Gln Asn
1 5 10 15

Gly Trp His Cys Val Cys Gln Pro Gly Trp Arg Gly Ala Gly Cys
20 25 30

<210> 392
 <211> 18
 <212> PRT
 <213> Homo sapiens

<400> 392
 Phe Pro Ser Gly Asn Val Thr Ser Val Leu Glu Leu Arg Asn Lys Asp
1 5 10 15

Phe Arg

<210> 393
 <211> 28
 <212> PRT
 <213> Homo sapiens

<400> 393
 Leu Glu Trp Pro Thr Asp Leu Ala Ile Asn Pro Met Asp Asn Ser Ile
 1 5 10 15
 Tyr Val Leu Asp Asn Asn Val Val Leu Gln Ile Thr
 20 25

<210> 394
 <211> 28
 <212> PRT
 <213> Homo sapiens

<400> 394
 Leu Ser Ala Pro Ser Ser Leu Ala Ala Ser Pro Asp Gly Thr Leu Tyr
 1 5 10 15
 Ile Ala Asp Leu Gly Asn Ile Arg Ile Arg Ala Val
 20 25

<210> 395
 <211> 26
 <212> PRT
 <213> Homo sapiens

<400> 395
 Val Asn Val Thr Tyr Ser Ser Thr Gly Gln Ile Ala Ser Ile Gln Arg
 1 5 10 15
 Gly Thr Thr Ser Glu Lys Val Asp Tyr Asp
 20 25

<210> 396
 <211> 17
 <212> PRT
 <213> Homo sapiens

<400> 396
 Ala Ile Asp Ala Gly Tyr Arg His Phe Asp Cys Ala Tyr Phe Tyr His
 1 5 10 15

Asn

<210> 397
 <211> 12
 <212> PRT
 <213> Homo sapiens

<400> 397

Pro Val Ile Lys Arg Ile Ala Lys Glu His Gly Lys
1 5 10

<210> 398

<211> 279

<212> PRT

<213> Homo sapiens

<400> 398

Ile Pro Ala Val Gly Leu Ser Ser Trp Lys Gln Ala Ser Pro Gly Lys
1 5 10 15

Val Thr Glu Ala Val Lys Glu Ala Ile Asp Ala Gly Tyr Arg His Phe
20 25 30

Asp Cys Ala Tyr Phe Tyr His Asn Glu Arg Glu Val Gly Ala Gly Ile
35 40 45

Arg Cys Lys Ile Lys Glu Gly Ala Val Arg Arg Glu Asp Leu Phe Ile
50 55 60

Ala Thr Lys Leu Trp Cys Thr Cys His Lys Lys Ser Leu Val Glu Thr
65 70 75 80

Ala Cys Arg Lys Ser Leu Lys Ala Leu Lys Leu Asn Tyr Leu Asp Leu
85 90 95

Tyr Leu Ile His Trp Pro Met Gly Phe Lys Pro Arg Val Gln Asp Leu
100 105 110

Pro Leu Asp Glu Ser Asn Met Val Ile Pro Ser Asp Thr Asp Phe Leu
115 120 125

Asp Thr Trp Glu Ala Met Glu Asp Leu Val Ile Thr Gly Leu Val Lys
130 135 140

Asn Ile Gly Val Ser Asn Phe Asn His Glu Gln Leu Glu Arg Leu Leu
145 150 155 160

Asn Lys Pro Gly Leu Arg Phe Lys Pro Leu Thr Asn Gln Ile Glu Cys
165 170 175

His Pro Tyr Leu Thr Gln Lys Asn Leu Ile Ser Phe Cys Gln Ser Arg
180 185 190

Asp Val Ser Val Thr Ala Tyr Arg Pro Leu Gly Gly Ser Ser Glu Gly
195 200 205

Val Asp Leu Ile Asp Asn Pro Val Ile Lys Arg Ile Ala Lys Glu His
210 215 220

Gly Lys Ser Pro Ala Gln Ile Leu Ile Arg Phe Gln Ile Gln Arg Asn
225 230 235 240

Val Ile Val Ile Pro Gly Ser Ile Thr Pro Ser His Ile Lys Glu Asn
 245 250 255

Ile Gln Val Phe Asp Phe Glu Leu Thr Gln His Asp Met Asp Asn Ile
 260 265 270

Leu Ser Leu Asn Arg Asn Leu
 275

<210> 399

<211> 17

<212> PRT

<213> Homo sapiens

<400> 399

Ala Ile Asp Ala Gly Tyr Arg His Phe Asp Cys Ala Tyr Phe Tyr His
 1 5 10 15

Asn

<210> 400

<211> 107

<212> PRT

<213> Homo sapiens

<400> 400

Ile Pro Ala Val Gly Leu Ser Ser Trp Lys Gln Ala Ser Pro Gly Lys
 1 5 10 15

Val Thr Glu Ala Val Lys Glu Ala Ile Asp Ala Gly Tyr Arg His Phe
 20 25 30

Asp Cys Ala Tyr Phe Tyr His Asn Glu Arg Glu Val Gly Ala Gly Ile
 35 40 45

Arg Cys Lys Ile Lys Glu Gly Ala Val Arg Arg Glu Asp Leu Phe Ile
 50 55 60

Ala Thr Lys Leu Trp Cys Thr Cys His Lys Lys Ser Leu Val Glu Thr
 65 70 75 80

Ala Cys Arg Lys Gly Leu Lys Ala Leu Lys Leu Asn Tyr Leu Asp Leu
 85 90 95

Tyr Leu Ile His Trp Pro Met Gly Phe Lys Pro
 100 105

<210> 401

<211> 62

<212> PRT

<213> Homo sapiens

<400> 401

Pro Leu Asp Glu Ser Asn Met Val Ile Pro Ser Asp Thr Asp Phe Leu
 1 5 10 15
 Asp Thr Trp Glu Ala Met Glu Asp Leu Val Ile Thr Gly Leu Val Lys
 20 25 30
 Asn Ile Gly Val Ser Asn Phe Asn His Glu Gln Leu Glu Arg Leu Leu
 35 40 45
 Asn Lys Pro Gly Leu Arg Phe Lys Pro Leu Thr Asn Gln Ile
 50 55 60

<210> 402
 <211> 48
 <212> PRT
 <213> Homo sapiens

<400> 402
 Leu Ile Arg Phe Gln Ile Gln Arg Asn Val Ile Val Ile Pro Gly Ser
 1 5 10 15
 Ile Thr Pro Ser His Ile Lys Glu Asn Ile Gln Val Phe Asp Phe Glu
 20 25 30
 Leu Thr Gln His Asp Met Asp Asn Ile Leu Ser Leu Asn Arg Asn Leu
 35 40 45

<210> 403
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 403
 Leu Ala Thr Val Tyr Val Asp Val Leu Lys Asp Ser Val Thr Ser Thr
 1 5 10 15
 Phe Ser Lys Leu Arg Glu Gln Leu Gly Pro Val Thr Gln Glu Phe Trp
 20 25 30
 Asp Asn Leu Glu Lys Glu Thr Glu Gly Leu Arg Gln Glu Met Ser Lys
 35 40 45
 Asp Leu Glu Glu Val Lys Ala Lys Val Gln Pro Tyr Leu Asp Asp Phe
 50 55 60
 Gln Lys Lys Trp Gln Glu Met Glu Leu Tyr Arg Gln Lys Val Glu
 65 70 75 80
 Pro Leu Arg Ala Glu Leu Gln Glu Gly Ala Arg Gln Lys
 85 90

<210> 404

<211> 237

<212> PRT

<213> Homo sapiens

<400> 404

Lys Ala Ala Val Leu Thr Leu Ala Val Leu Phe Leu Thr Gly Ser Gln
1 5 10 15

Ala Arg His Phe Trp Gln Gln Asp Glu Pro Pro Gln Ser Pro Trp Asp
20 25 30

Arg Val Lys Asp Leu Ala Thr Val Tyr Val Asp Val Leu Lys Asp Ser
35 40 45

Val Thr Ser Thr Phe Ser Lys Leu Arg Glu Gln Leu Gly Pro Val Thr
50 55 60

Gln Glu Phe Trp Asp Asn Leu Glu Lys Glu Thr Glu Gly Leu Arg Gln
65 70 75 80

Glu Met Ser Lys Asp Leu Glu Glu Val Lys Ala Lys Val Gln Pro Tyr
85 90 95

Leu Asp Asp Phe Gln Lys Lys Trp Gln Glu Glu Met Glu Leu Tyr Arg
100 105 110

Gln Lys Val Glu Pro Leu Arg Ala Glu Leu Gln Glu Gly Ala Arg Gln
115 120 125

Lys Leu His Glu Leu Gln Glu Lys Leu Ser Pro Leu Gly Glu Glu Met
130 135 140

Arg Asp Arg Ala Arg Ala His Val Asp Ala Leu Arg Thr His Leu Ala
145 150 155 160

Pro Tyr Ser Asp Glu Leu Arg Gln Arg Leu Ala Ala Arg Leu Glu Ala
165 170 175

Leu Lys Glu Asn Gly Gly Ala Arg Leu Ala Glu Tyr His Ala Lys Ala
180 185 190

Thr Glu His Leu Ser Thr Leu Ser Glu Lys Ala Lys Pro Ala Leu Glu
195 200 205

Asp Leu Arg Gln Gly Leu Leu Pro Val Leu Glu Ser Phe Lys Val Ser
210 215 220

Phe Leu Ser Ala Leu Glu Glu Tyr Thr Lys Lys Leu Asn
225 230 235

<210> 405

<211> 93

<212> FPT

<213> Homo sapiens

<400> 405

Leu Ala Thr Val Tyr Val Asp Val Leu Lys Asp Ser Val Thr Ser Thr
 1 5 10 15
 Phe Ser Lys Leu Arg Glu Gln Leu Gly Pro Val Thr Gln Glu Phe Trp
 20 25 30
 Asp Asn Leu Glu Lys Glu Thr Glu Gly Leu Arg Gln Glu Met Ser Lys
 35 40 45
 Asp Leu Glu Glu Val Lys Ala Lys Val Gln Pro Tyr Leu Asp Asp Phe
 50 55 60
 Gln Lys Lys Trp Gln Glu Met Glu Leu Tyr Arg Gln Lys Val Glu
 65 70 75 80
 Pro Leu Arg Ala Glu Leu Gln Glu Gly Ala Arg Gln Lys
 85 90

<210> 406

<211> 204

<212> PRT

<213> Homo sapiens

<400> 406

Lys Ala Ala Val Leu Thr Leu Ala Val Leu Phe Leu Thr Gly Ser Gln
 1 5 10 15
 Ala Arg His Phe Trp Gln Gln Asp Glu Pro Pro Gln Ser Pro Trp Asp
 20 25 30
 Arg Val Lys Asp Leu Ala Thr Val Tyr Val Asp Val Leu Lys Asp Ser
 35 40 45
 Val Thr Ser Thr Phe Ser Lys Leu Arg Glu Gln Leu Gly Pro Val Thr
 50 55 60
 Gln Glu Phe Trp Asp Asn Leu Glu Lys Glu Thr Glu Gly Leu Arg Gln
 65 70 75 80
 Glu Met Ser Lys Asp Leu Glu Glu Val Lys Ala Lys Val Gln Pro Tyr
 85 90 95
 Leu Asp Asp Phe Gln Lys Lys Trp Gln Glu Glu Met Glu Leu Tyr Arg
 100 105 110
 Gln Lys Val Glu Pro Leu Arg Ala Glu Leu Gln Glu Gly Ala Arg Gln
 115 120 125
 Lys Leu His Glu Leu Arg Gln Arg Leu Ala Glu Arg Leu Glu Ala Leu
 130 135 140
 Lys Glu Asn Gly Gly Ala Arg Leu Ala Glu Tyr His Ala Lys Ala Thr
 145 150 155 160
 Glu His Leu Ser Thr Leu Ser Glu Lys Ala Lys Pro Ala Leu Glu Asp

165

170

175

Leu Arg Gln Gly Leu Leu Pro Val Leu Glu Ser Phe Lys Val Ser Phe
 180 185 190

Leu Ser Ala Leu Glu Glu Tyr Thr Lys Lys Leu Asn
 195 200

<210> 407

<211> 70

<212> PRT

<213> Homo sapiens

<400> 407

His Ser Ser Val Gly Ala Lys Asp Leu Val Cys Ser Lys Met Ser Arg
 1 5 10 15

Ala Lys Asp Ala Val Ser Ser Gly Val Ala Ser Val Val Asp Val Ala
 20 25 30

Lys Gly Val Val Gln Gly Gly Leu Asp Thr Thr Arg Ser Ala Leu Thr
 35 40 45

Gly Thr Lys Glu Val Val Ser Ser Gly Val Thr Gly Ala Met Asp Met
 50 55 60

Ala Lys Gly Ala Val Gln
 65 70

<210> 408

<211> 74

<212> PRT

<213> Homo sapiens

<400> 408

Asn Val Ala Lys Gly Thr Ile Gln Thr Gly Val Asp Thr Thr Lys Thr
 1 5 10 15

Val Leu Thr Gly Thr Lys Asn Thr Val Cys Ser Gly Val Thr Gly Ala
 20 25 30

Val Asn Leu Ala Lys Glu Ala Ile Gln Gly Gly Leu Asp Thr Thr Lys
 35 40 45

Ser Met Val Met Gly Thr Lys Asp Thr Met Ser Thr Gly Leu Thr Gly
 50 55 60

Ala Ala Asn Val Ala Lys Gly Ala Met Gln
 65 70

<210> 409

<211> 74

<212> PRT

<213> Homo sapiens

<400> 409

Gly Thr Val Gln Thr Gly Val Asp Thr Thr Lys Thr Val Leu Thr Gly
1 5 10 15

Thr Lys Asp Thr Val Cys Ser Gly Val Thr Ser Ala Val Asn Val Ala
20 25 30

Lys Gly Ala Val Gln Gly Gly Leu Asp Thr Thr Lys Ser Val Val Ile
35 40 45

Gly Thr Lys Asp Thr Met Ser Thr Gly Leu Thr Gly Ala Ala Asn Val
50 55 60

Ala Lys Gly Ala Val Gln Thr Gly Val Asp
65 70

<210> 410

<211> 92

<212> PRT

<213> Homo sapiens

<400> 410

Gly Ala Val Gln Met Gly Val Asp Thr Ala Lys Thr Val Leu Thr Gly
1 5 10 15

Thr Lys Asp Thr Val Cys Ser Gly Val Thr Gly Ala Ala Asn Val Ala
20 25 30

Lys Gly Ala Val Gln Thr Gly Leu Lys Thr Thr Gln Asn Ile Ala Thr
35 40 45

Gly Thr Lys Asn Thr Leu Gly Ser Gly Val Thr Gly Ala Ala Lys Val
50 55 60

Ala Lys Gly Ala Val Gln Gly Gly Leu Asp Thr Thr Lys Ser Val Leu
65 70 75 80

Thr Gly Thr Lys Asp Ala Val Ser Thr Gly Leu Thr
85 90

<210> 411

<211> 366

<212> PRT

<213> Homo sapiens

<400> 411

Leu Asp Thr Thr Lys Ser Val Leu Thr Gly Thr Lys Asp Ala Val Ser
1 5 10 15

Thr Gly Leu Thr Gly Ala Val Asn Leu Ala Lys Gly Thr Val Gln Thr
20 25 30

Gly Val Asp Thr Ser Lys Thr Val Leu Thr Gly Thr Lys Asp Thr Val
35 40 45

Cys Ser Gly Val Thr Gly Ala Val Asn Val Ala Lys Gly Thr Val Gln
 50 55 60
 Thr Gly Val Asp Thr Ala Lys Thr Val Leu Ser Gly Ala Lys Asp Ala
 65 70 75 80
 Val Thr Thr Gly Val Thr Gly Ala Val Asn Val Ala Lys Gly Thr Val
 85 90 95
 Gln Thr Gly Val Asp Ala Ser Lys Ala Val Leu Met Gly Thr Lys Asp
 100 105 110
 Thr Val Phe Ser Gly Val Thr Gly Ala Met Ser Met Ala Lys Gly Ala
 115 120 125
 Val Gln Gly Gly Leu Asp Thr Thr Lys Thr Val Leu Thr Gly Thr Lys
 130 135 140
 Asp Ala Val Ser Ala Gly Leu Met Gly Ser Gly Asn Val Ala Thr Gly
 145 150 155 160
 Ala Thr His Thr Gly Leu Ser Thr Phe Gln Asn Trp Leu Pro Ser Thr
 165 170 175
 Pro Ala Thr Ser Trp Gly Gly Leu Thr Ser Ser Arg Thr Thr Ala Gln
 180 185 190
 Leu Ala Ala Ser Gln Pro Gly Pro Lys Val Leu Ser Ala Glu Gln Gly
 195 200 205
 Ser Tyr Phe Val Arg Leu Gly Asp Leu Gly Pro Ser Phe Arg Gln Arg
 210 215 220
 Ala Phe Glu His Ala Val Ser His Leu Gln His Gly Gln Phe Gln Ala
 225 230 235 240
 Arg Asp Thr Leu Ala Gln Leu Gln Asp Cys Phe Arg Leu Ile Glu Lys
 245 250 255
 Ala Gln Gln Ala Pro Glu Gly Gln Pro Arg Leu Asp Gln Gly Ser Gly
 260 265 270
 Ala Ser Ala Glu Asp Ala Ala Val Gln Glu Arg Val Cys Gly Leu Leu
 275 280 285
 Arg Gln Leu His Thr Ala Tyr Ser Gly Leu Val Ser Ser Leu Gln Gly
 290 295 300
 Leu Pro Ala Glu Leu Gln Gln Pro Val Gly Arg Ala Arg His Ser Leu
 305 310 315 320
 Cys Glu Leu Tyr Gly Ile Val Ala Ser Ala Gly Ser Val Glu Glu Leu
 325 330 335
 Pro Ala Glu Arg Leu Val Gln Ser Arg Gly Gly Val His Gln Ala Trp
 340 345 350

Gln Gly Leu Glu Gln Leu Leu Glu Gly Leu Gln His Asn Pro
355 360 365



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